



75. Looking northeast from top of structure



18. Looking east along SR 64 to investigated area



19. Looking northeast from the SR 64 roadside toward depression in agricultural field
Des. No. 1900066

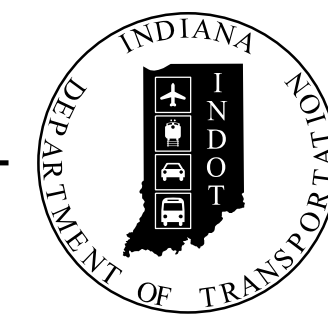


20. Looking southeast toward structure from agricultural field

PROJECT	DESIGNATION
1900066	1900066
CONTRACT	BRIDGE FILE
B-42399	064-31-10475

Excerpt

INDIANA DEPARTMENT OF TRANSPORTATION



STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
064-31-10475	Cast-in Place 3-Sided, Flat Top Concrete Structure	1 Span: 26'-0" Skew: 45° Lt.	Branch Blue River	47+44.00 Line "A"

BRIDGE PLANS

FOR SPANS OVER 20 FEET

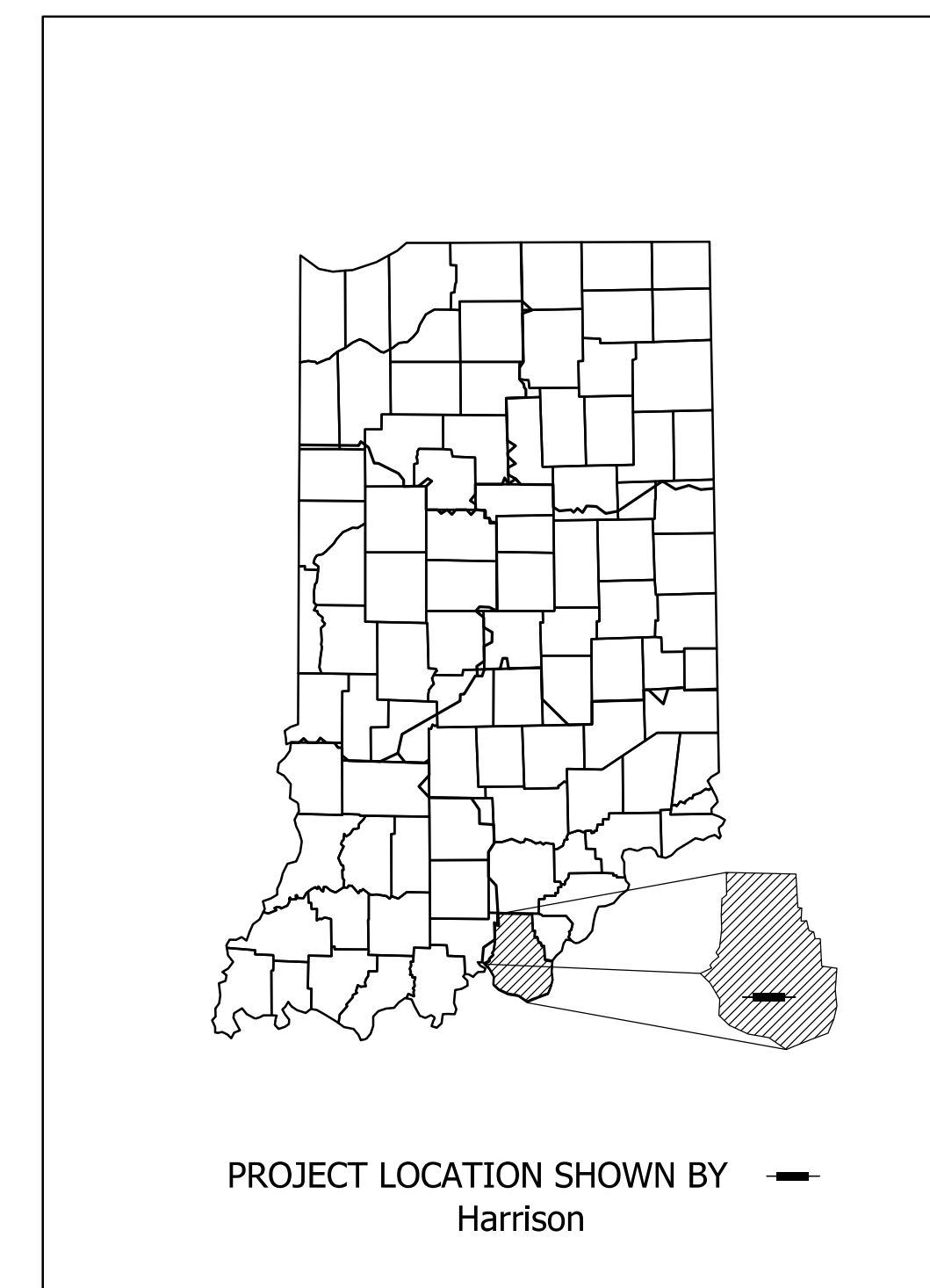
ROUTE: SR 64 AT: RP 90+9

PROJECT NO. 1900066 P.E.
1900066 R/W
1900066 CONST.

Bridge Replacement on SR 64 over Branch Blue River
Located 0.11 Miles East of SR 337
Section 17, T-2-S, R-3-E, Blue River Township, Harrison County, Indiana

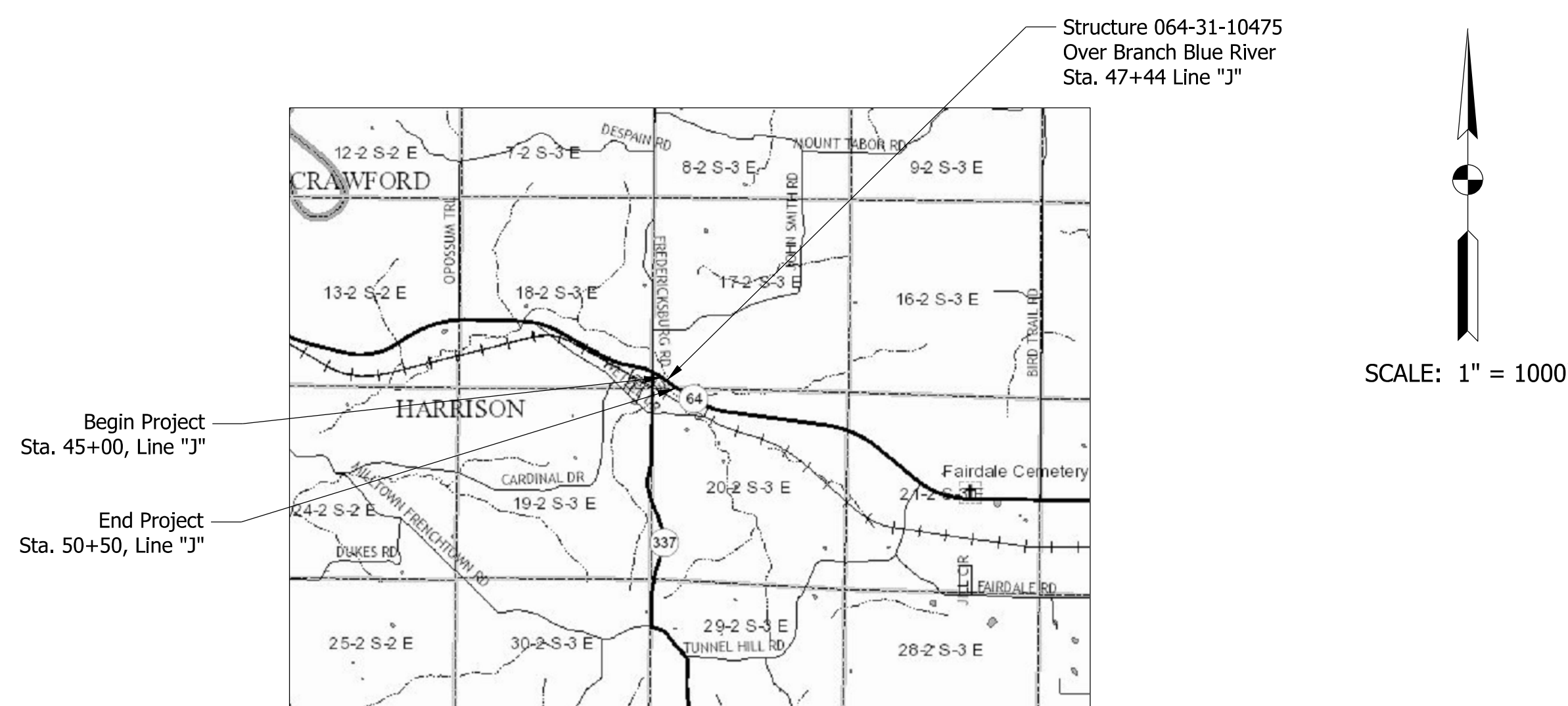
TRAFFIC DATA		
A.A.D.T. (2024)		4290 V.P.D.
A.A.D.T. (2044)		4368 V.P.D.
D.H.V (2044)		478 V.P.H.
DIRECTIONAL DISTRIBUTION		51 %
TRUCKS		7 % A.A.D.T. 6 % D.H.V.

DESIGN DATA	
DESIGN SPEED	55 M.P.H.
PROJECT DESIGN CRITERIA	3R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	STATE COLLECTOR
RURAL/URBAN	RURAL
TERRAIN	LEVEL
ACCESS CONTROL	NONE



LATITUDE: N 38°20'8" LONGITUDE: W 86°12'58"

BRIDGE LENGTH:	0.008	MI.
ROADWAY LENGTH:	0.058	MI.
TOTAL LENGTH:	0.066	MI.
MAX. GRADE:	+0.50	%



STAGE 2 PLANS
9/1/2023

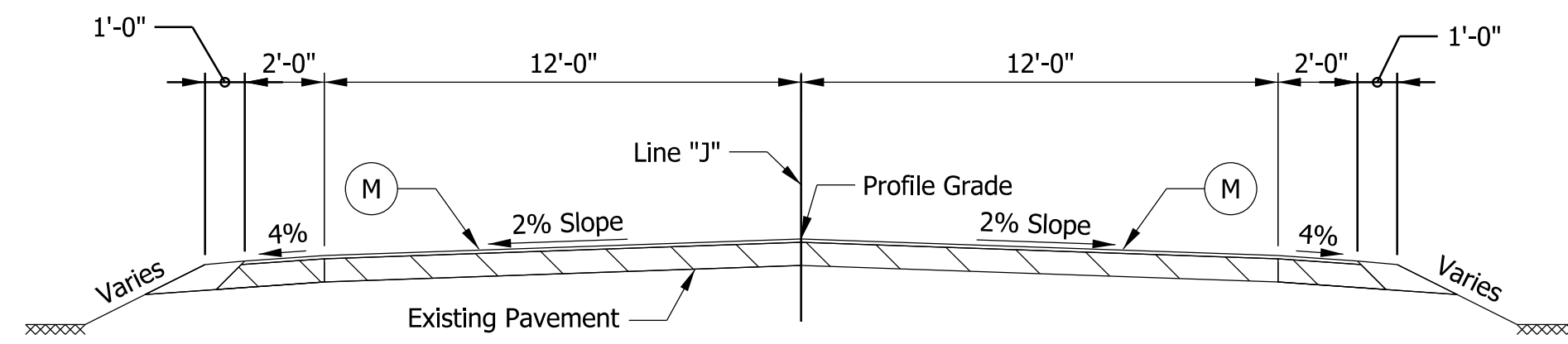
INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2024
TO BE USED WITH THESE PLANS.

PLANS PREPARED BY: _____	PHONE NUMBER _____
CERTIFIED BY: _____	DATE _____
RECOMMENDED FOR LETTING: _____	DATE _____
INDIANA DEPARTMENT OF TRANSPORTATION	

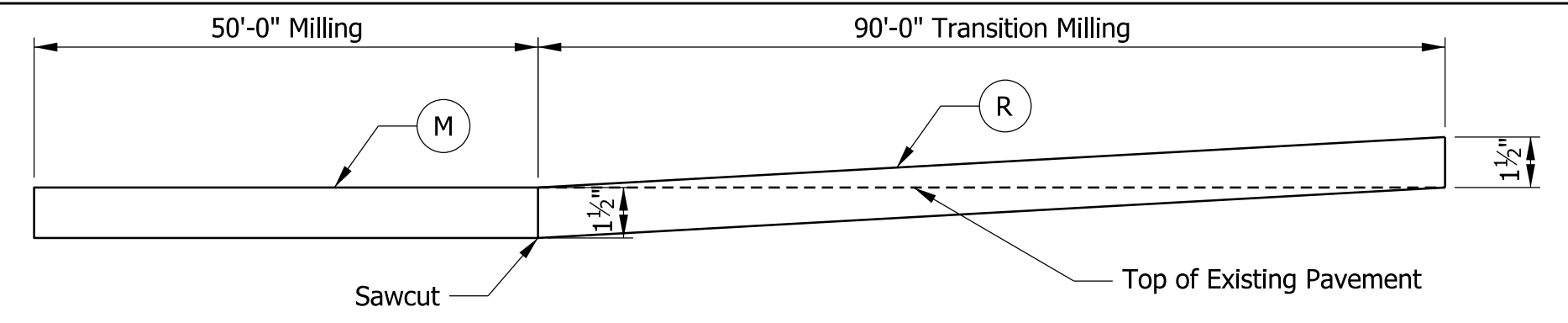
BRIDGE FILE	
064-31-10475	
DESIGNATION	
1900066	
SHEETS	
1	of 22
CONTRACT	PROJECT
B-42399	1900066

Plot: 8/31/2023 9:30 AM

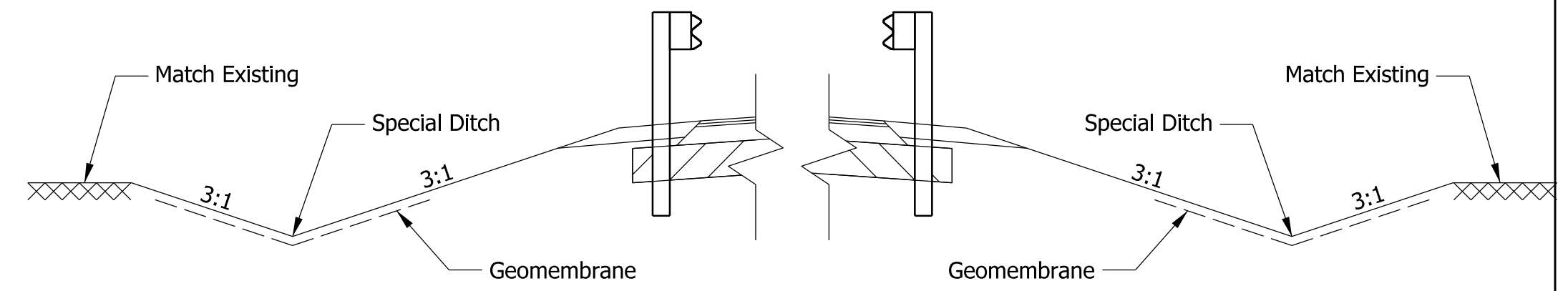
File: pw:\indot-pw.bentley.com\indot-pw-01\Documents\Seymour\1900066\Design\MS\Ttl Title.dgn
Model:BR_Title Sheet



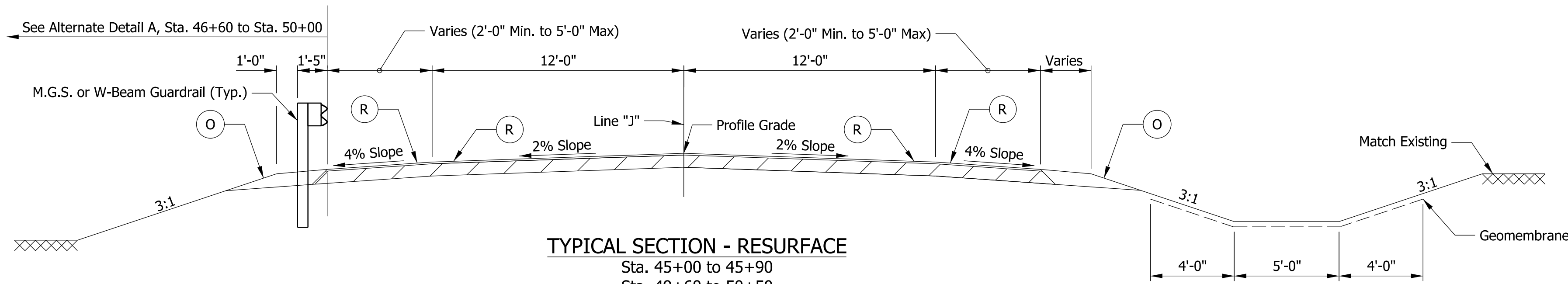
TYPICAL SECTION - INCIDENTAL Line "J"
 Sta. 44+50 to 45+00
 Sta. 50+50 to 51+00
 Scale: 1/4" = 1'-0"



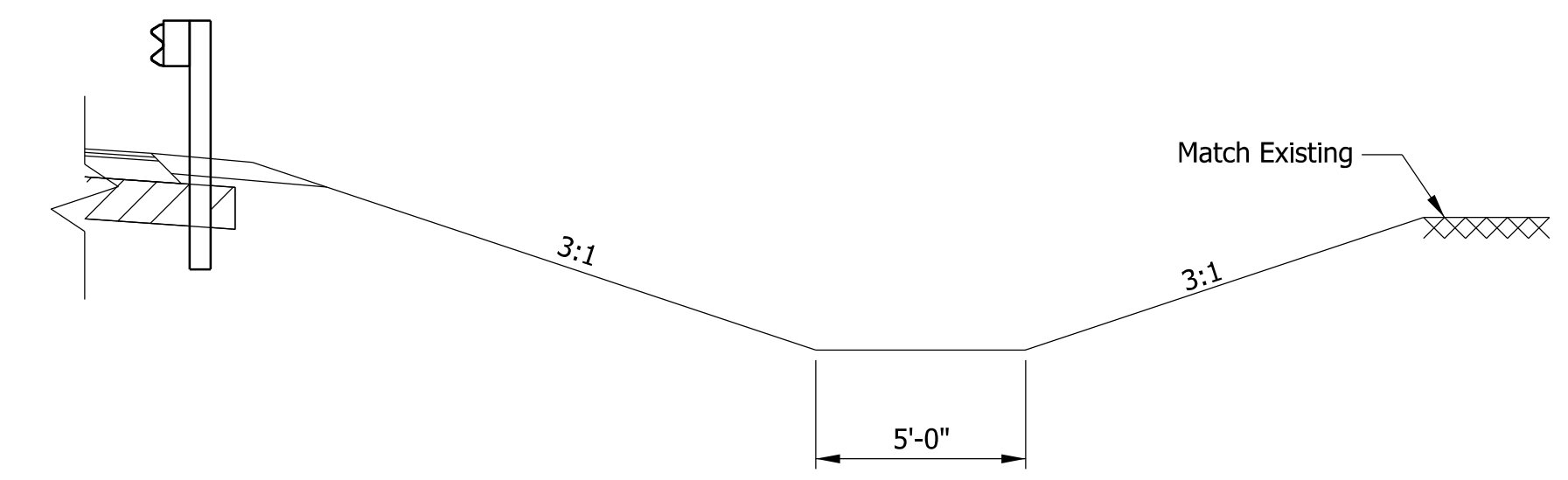
TRANSITION MILLING DETAIL
 Sta. 45+00 to 45+90
 Sta. 49+60 to 50+50
 Scale: None



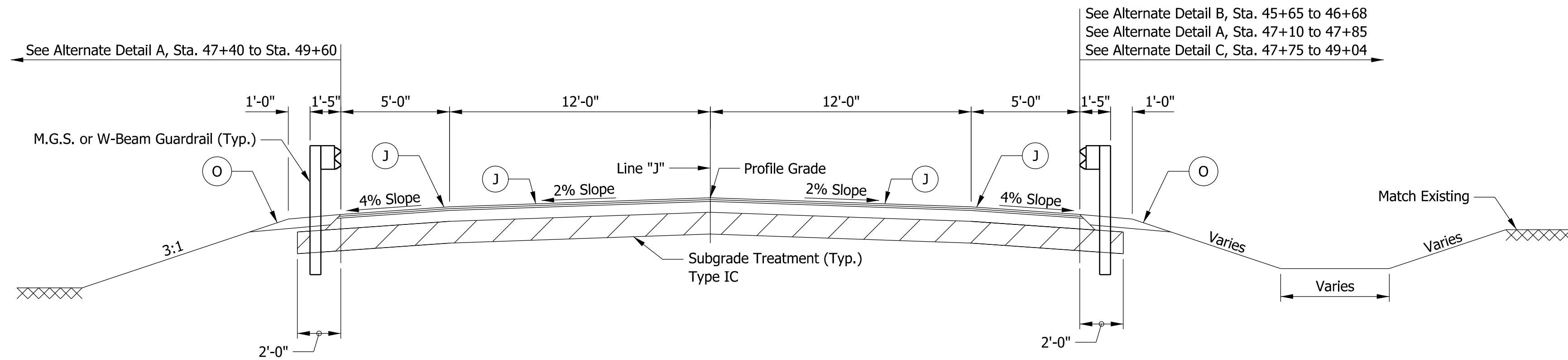
ALTERNATE DETAIL A
 Sta. 47+40 to 50+05 Lt.
 Sta. 47+10 to 47+85 Rt.
 Scale: 1/4" = 1'-0"



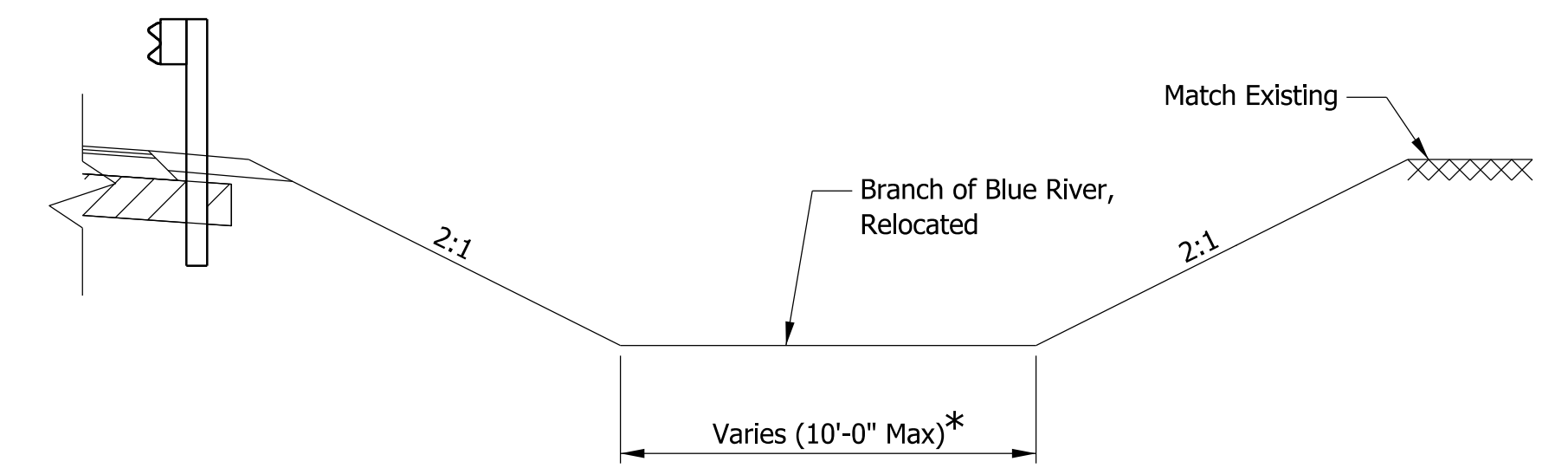
TYPICAL SECTION - RESURFACE
 Sta. 45+00 to 45+90
 Sta. 49+60 to 50+50
 Scale: 1/4" = 1'-0"



ALTERNATE DETAIL B
 Sta. 45+65.00 to 46+68.00
 Scale: 1/4" = 1'-0"



TYPICAL SECTION - FULL DEPTH
 Sta. 45+90 to 49+60
 Scale: 1/4" = 1'-0"



ALTERNATE DETAIL C
 Sta. 47+75.00 to 49+04.00
 Scale: 1/4" = 1'-0"

* See Layout Sheet for Bottom Width and Location of Branch of Blue River, Relocated

LEGEND

- (J) 165 lbs/syd QC/QA-HMA, 3, 64, Surface, 9.5 mm on 275 lbs/syd QC/QA-HMA, 3, 64, Intermediate, 19.0 mm on 660 lbs/syd QC/QA-HMA, 3, 64, Base, 25.0 mm on Subgrade Treatment Type IC on Geotextile for Pavement, Type 2B
- (R) 165 lbs/syd QC/QA-HMA, 3, 64, Surface, 9.5 mm
- (M) Milling 1 1/2 in., 165 lbs/syd QC/QA-HMA, 3, 64, Surface, 9.5 mm
- (O) Compacted Aggregate No. 53

DATE	REVISION

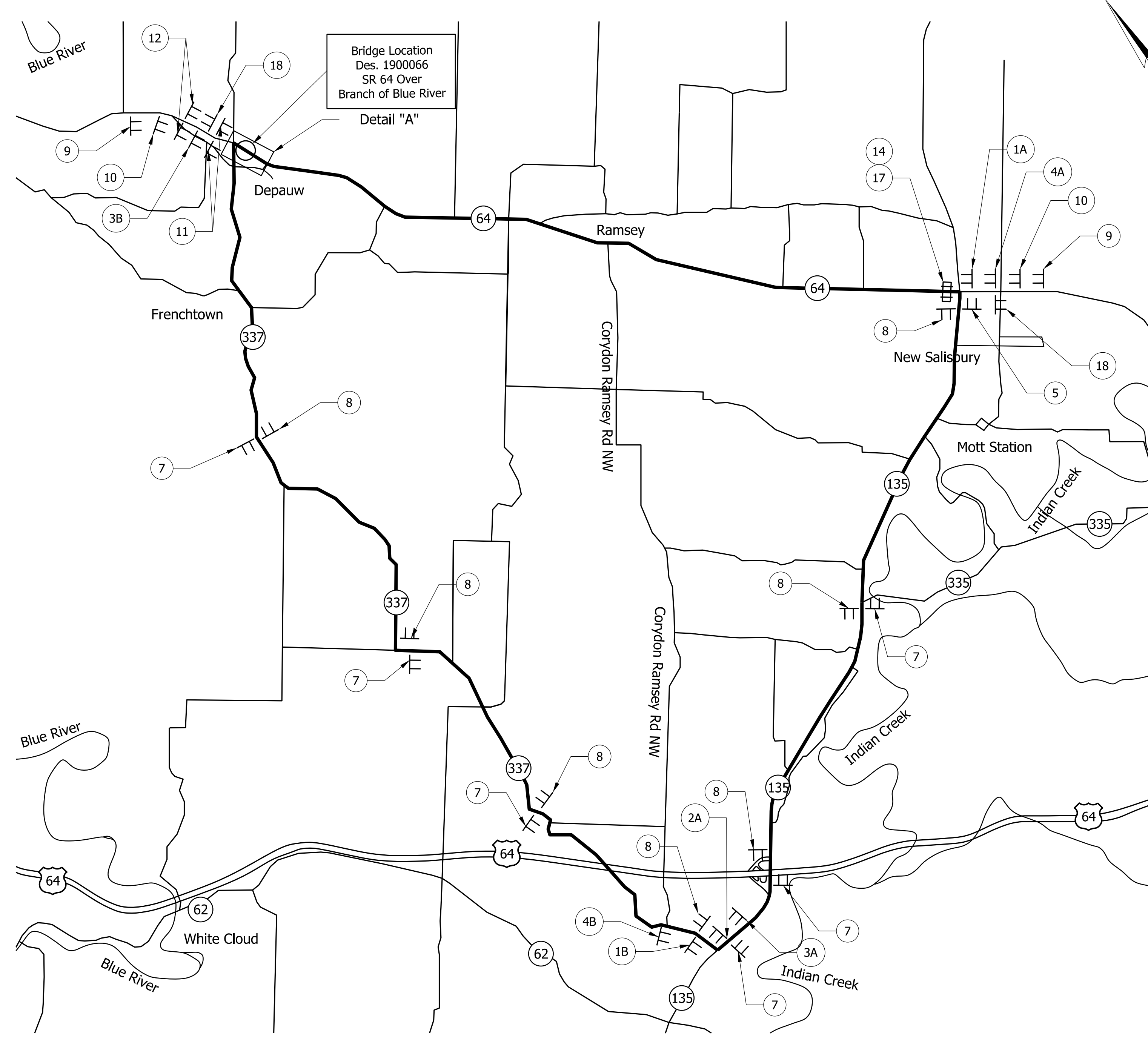
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: ARS	7/2023	DRAWN: ARS 7/2023
CHECKED: JRL	8/2023	CHECKED: JRL 8/2023

INDIANA DEPARTMENT OF TRANSPORTATION	
TYPICAL CROSS SECTIONS	

SCALE	BRIDGE FILE
1/4" = 1'-0"	064-31-10475
DESIGNATION	1900066
SHEETS	4 of 22
CONTRACT	PROJECT
B-42399	1900066

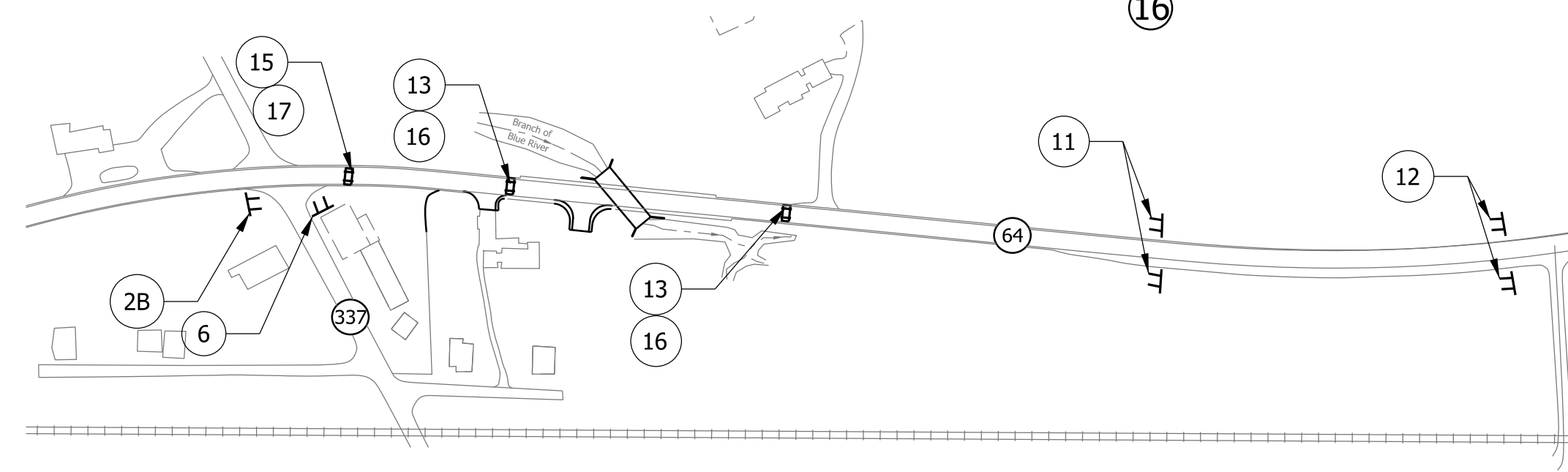
Plot: 8/31/2023 9:30 AM

File: pw:\indot-pw.bentley.com\indot-pw-01\Documents\Seymour\1900066\Design\MS\Sht Typical Section.dgn
 Model: BR_Detail Sheet



Bridge Location
Des. 1900066
SR 64 Over
Branch of Blue River
Detail "A"

DETOUR PLAN
Scale: None



DETAIL A
Scale: 200' = 1"

	XM 4-8 M3-4 (S) M1-4 or M1-6 M6-1S		XM 4-8 M3-4 (S) M1-4 or M1-6 M6-1S		XM 4-8 M3-4 (S) M1-4 or M1-6 M5-1(R) S		XM 4-8 M3-4 (S) M1-4 or M1-6 M5-1(L) S		XM 4-6S XM 4-8 M1-4 or M1-6 M6-1S
	XM 4-8 M3-2 (S) M1-4 or M1-6 M6-1S		XM 4-8 M3-2 (S) M1-4 or M1-6 M6-1S		XM 4-8 M3-2 (S) M1-4 or M1-6 M5-1(R) S		XM 4-8 M3-2 (S) M1-4 or M1-6 M5-1(L) S		XM 4-6S XM 4-8 M1-4 or M1-6 M6-1S
	XM 4-6S XM 4-8 M1-4 or M1-6 M6-1S		XM 4-8 M3-2 (S) M1-4 or M1-6 M6-3S		XM 4-8 M3-4 (S) M1-4 or M1-6 M6-3S		ROAD CLOSED AHEAD XW20-3		DETOUR AHEAD XW20-2
	ROAD CLOSED 500 FT XW20-3		ROAD CLOSED 1000 FT XW20-3		ROAD CLOSED R11-2		ROAD CLOSED 3.5 MILES AHEAD LOCAL TRAFFIC ONLY R11-3 XW4-10 (L)		ROAD CLOSED 0.1 MILES AHEAD LOCAL TRAFFIC ONLY R11-3 XW4-10 (R)
	TYPE III-A BARRICADE (Striped on One Side) 16		TYPE III-B BARRICADE (Striped on Both Sides) 17		END CONSTRUCTION XG20-2 18				

QUANTITY SUMMARY TABLE	
ITEM	QUANTITY
Construction Sign Type A	14 Each
Road Closure Sign Assembly	4 Each
Detour Route Marker Assembly	23 Each
Barricade Type III-A	48 Lft.
Barricade Type III-B	48 Lft.

DATE	REVISION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CMB	10/2020	DRAWN: TLA
CHECKED: ARS	10/2020	CHECKED: CMB

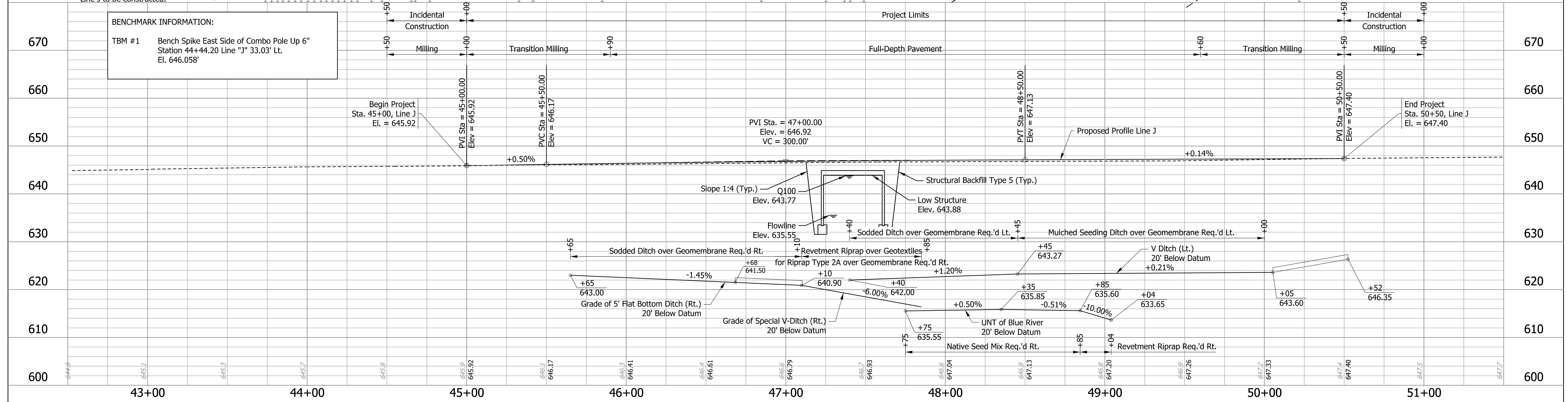
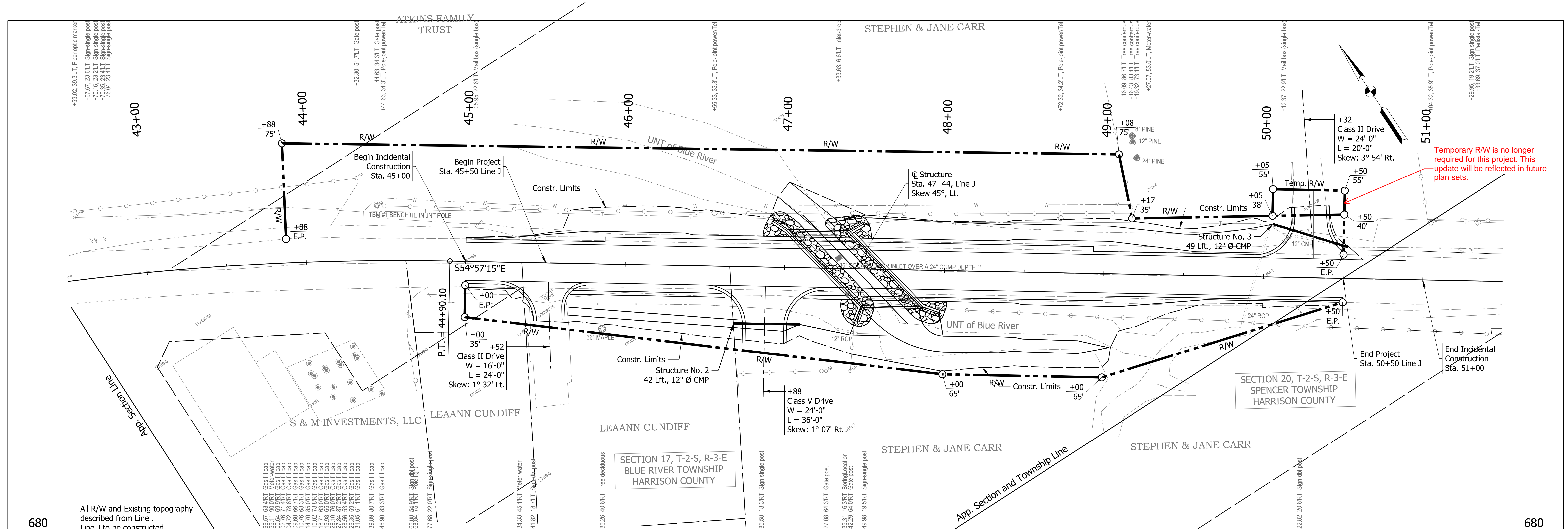
INDIANA DEPARTMENT OF TRANSPORTATION

DETOUR

SCALE AS SHOWN	BRIDGE FILE 064-31-10475
DESIGNATION 1900066	SHEETS 5 of 22
CONTRACT B-42399	PROJECT 1900066

Plot: 8/31/2023 9:30 AM

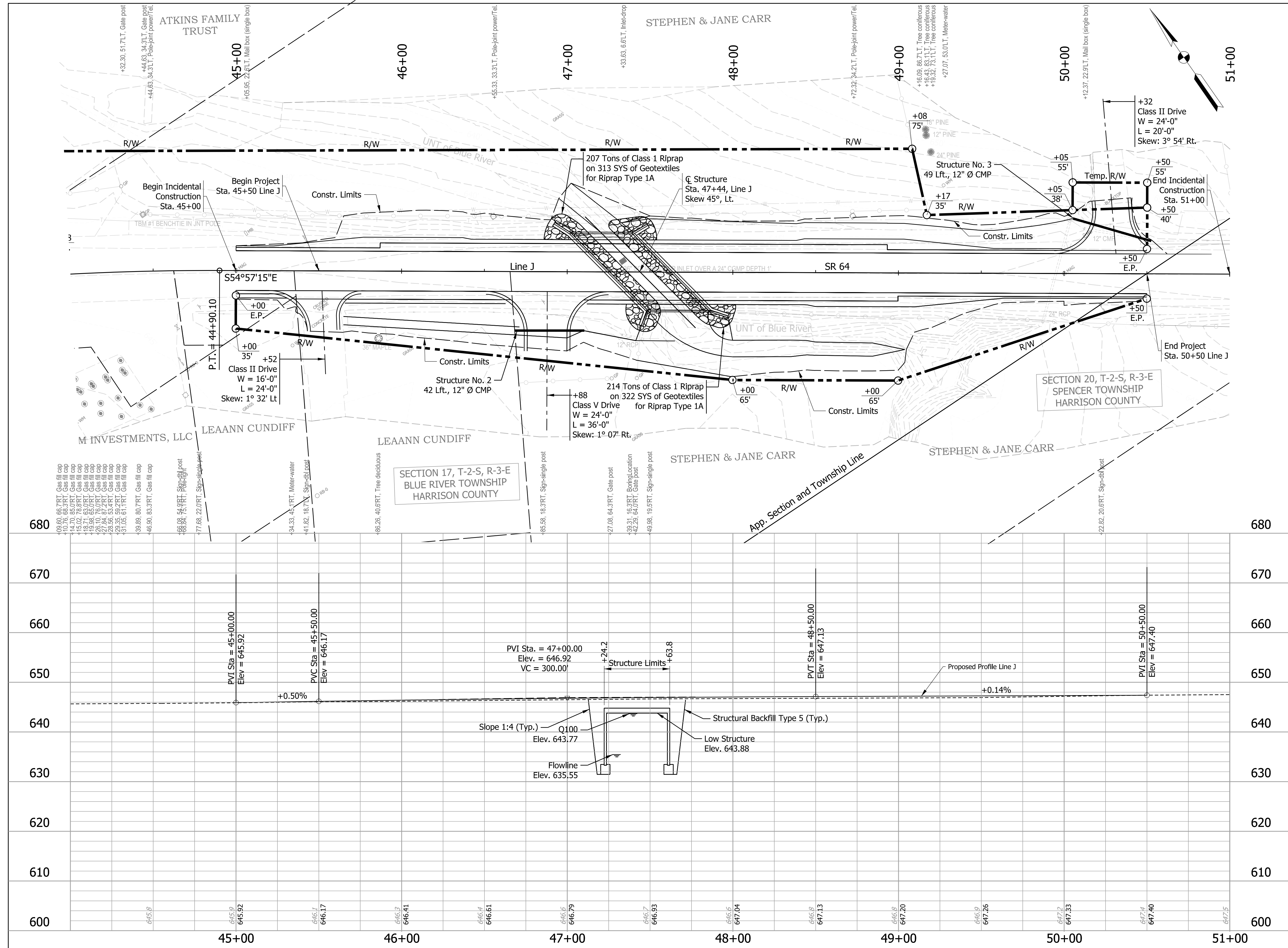
File: pw:\indot-pw.bentley.com\indot-pw-01\Documents\Seymour\1900066\Design\MS\Sht Detour Model:BR_Detail Sheet



<p>RECOMMENDED FOR APPROVAL</p> <p>DESIGNED: ARS 7/2023 DRAWN: ARS 7/2023</p> <p>CHECKED: JRL 8/2023 CHECKED: JRL 8/2023</p>		<p>INDIANA DEPARTMENT OF TRANSPORTATION</p> <p>DESIGN ENGINEER DATE</p>		<p>SCALE</p> <p>1" = 30'-0" Horizontal</p> <p>1" = 10'-0" Vertical</p>		<p>BRIDGE FILE</p> <p>064-31-10475</p> <p>DESIGNATION</p> <p>1900066</p>	
<p>PLAN AND PROFILE - LINE "J"</p>				<p>SURVEY BOOK</p> <p>6 of 22</p>		<p>SHEETS</p>	
				<p>CONTRACT</p> <p>B-42399</p>		<p>PROJECT</p> <p>1900066</p>	

File: pw:\indot-pw.bentley.com\indot-pw-01\Documents\Seymour\1900066\Design\MS\Sh Plan and Profile Model: Line J - Plan and Profile [Sheet]

Plot: 8/31/2023 9:30 AM



PRESENT STRUCTURE
 The existing structure (064-31-06286 A) is a precast three-sided structure built in 1950. The clear roadway width is 28 ft with a single span of 24 ft. The structure has a 45 deg. skew Lt. The existing structure is to be removed.

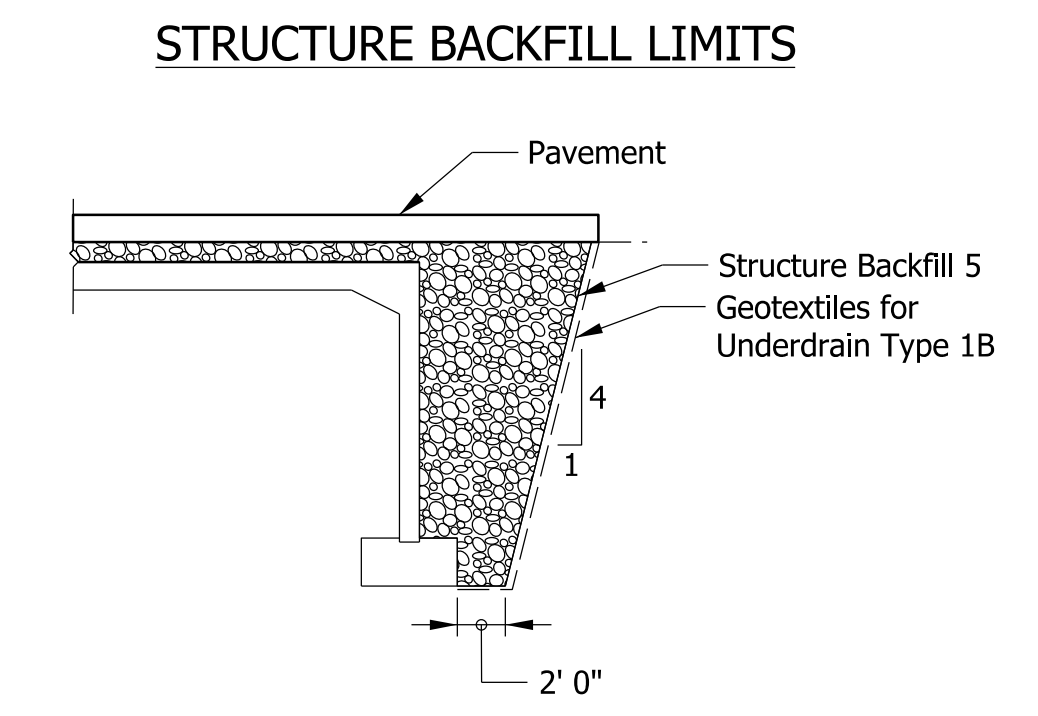
HYDRAULIC DATA

Waterway Opening Required	150.96 Sq. ft.
Waterway Opening Provided	213.7 Sq. ft.
Drainage Area	2.45 Sq. mi.
Design Discharge, Q100	900 Cfs.
Velocity Q100 Elev.	643.77 ft.
Estimated Scour Elev.	N/A
Backwater at Q100	0.43 ft.
Existing Waterway Opening	142.3 Sq. ft.
Existing Backwater	0.52 ft.
Upper Limit of Wet Exc. Elev.	N/A
Low Structure Elev.	643.80 ft.
Existing Low Structure Elev.	643.67 ft.

EARTHWORK TABULATION

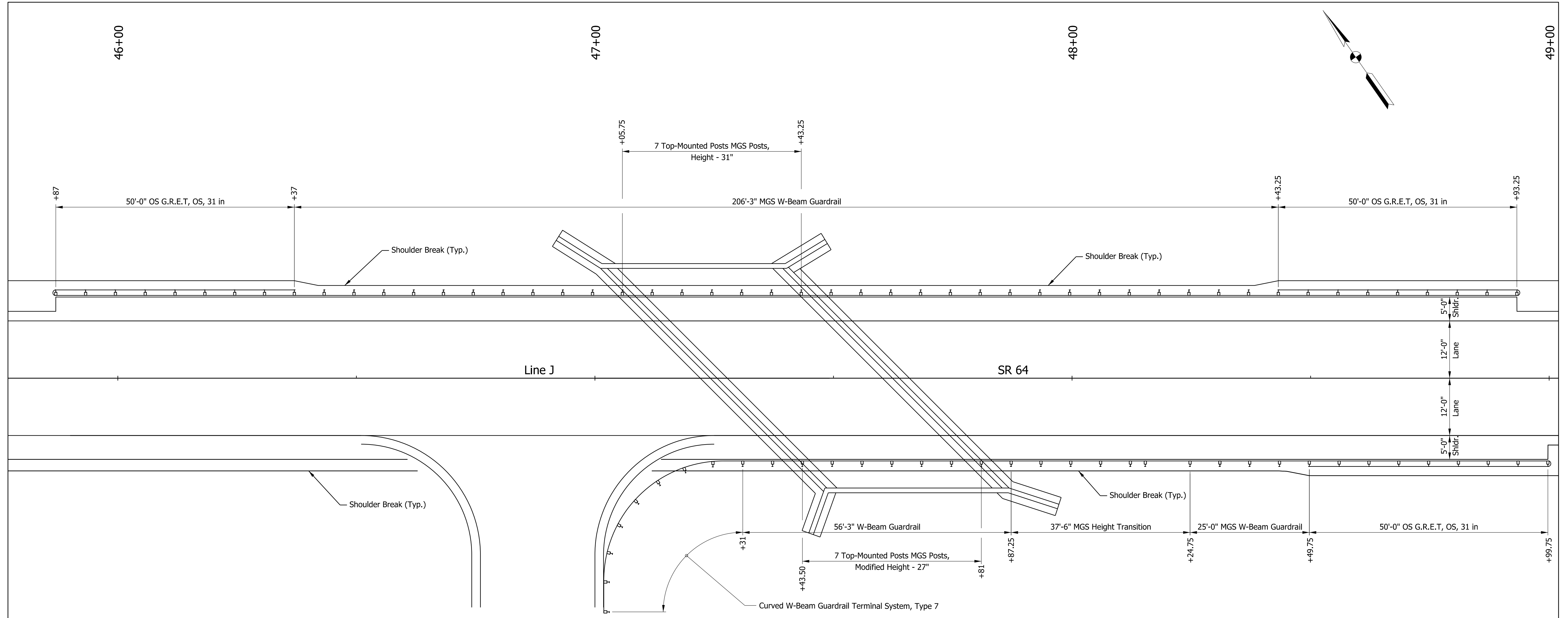
Fill + 20%	483 Cys.
Common Excavation	873 Cys.
Usable Waterway Excavation (70%)	147 Cys.
Surplus Foundation Excavation	333 Cys.
Waste	870 Cys.
Total Waterway Excavation	210 Cys.
Benching (Estimated)	531 Cys.

No direct payment. Benching will not be paid for as Common Excavation.



CAST-IN-PLACE THREE-SIDED, FLAT TOP CONCRETE STRUCTURE
 SPAN: AT 26'-0"; RISE: 10'-4",
 34'-0" CLEAR ROADWAY; 45° SKEW LT.
 SR 64 OVER UNT OF BLUE RIVER
 IN HARRISON COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____ DESIGNED: ARS 7/2023 DRAWN: ARS 7/2023 CHECKED: JRL 8/2023 CHECKED: JRL 8/2023	INDIANA DEPARTMENT OF TRANSPORTATION LAYOUT	HORIZONTAL SCALE 1"=30' BRIDGE FILE 064-31-10475
		VERTICAL SCALE 1"=10' DESIGNATION 1900066
		SURVEY BOOK _____ SHEETS 10 of 22 CONTRACT B-42399 PROJECT 1900066



GUARDRAIL LAYOUT
Scale: 1" = 10'-0"

LOCATION		MGS W-BEAM GUARDRAIL LENGTH																				REMARKS				
FROM STATION	TO STATION	LEFT	MEDIAN LEFT	MEDIAN RIGHT	RIGHT	STANDARD POST AT 6 FT 3 IN. SPA.	STANDARD POST AT 3 FT 1.5 IN. SPA.	DOUBLE FACED AT 6 FT 3 IN. SPA.	DOUBLE FACED AT 3 FT 1.5 IN. SPA.	HEIGHT TRANSITION	GUARDRAIL TRANSITION WITH CURB	GUARDRAIL TRANSITION WITHOUT CURB	STRUCTURE TOP-MOUNTED POST	CABLE TERMINAL ANCHOR	SHOP CURVED AT ____ FT. SPA.	LONG-SPAN GUARDRAIL	GUARDRAIL END TREATMENT TYPE OS	GUARDRAIL END TREATMENT TYPE MS	GUARDRAIL TRANSITION TYPE TGB	GUARDRAIL W-BEAM, 6 FT 3 IN. SPACING	GUARDRAIL, TERMINAL SYSTEM, W-BEAM CURVED, 7		GUARDRAIL REMOVE	GUARDRAIL RESET	IMPACT ATTENUATOR TYPE ____	
						LFT	LFT	LFT	LFT	EACH	EACH	EACH	EACH	EACH	EACH	LFT	EACH	EACH	EACH	EACH	LFT		EACH	LFT	LFT	EACH
45+87.00	48+93.25	X				206.25							7					2								
47+31.00	48+99.75		X			25				1			7							56.25	1					
TOTALS						231.25				1			14					3		56.25	1					

RECOMMENDED FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: ARS 7/2023 DRAWN: ARS 7/2023

CHECKED: JRL 8/2023 CHECKED: JRL 8/2023

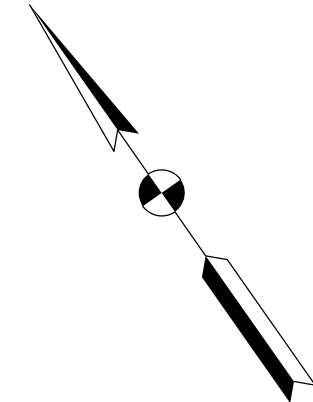
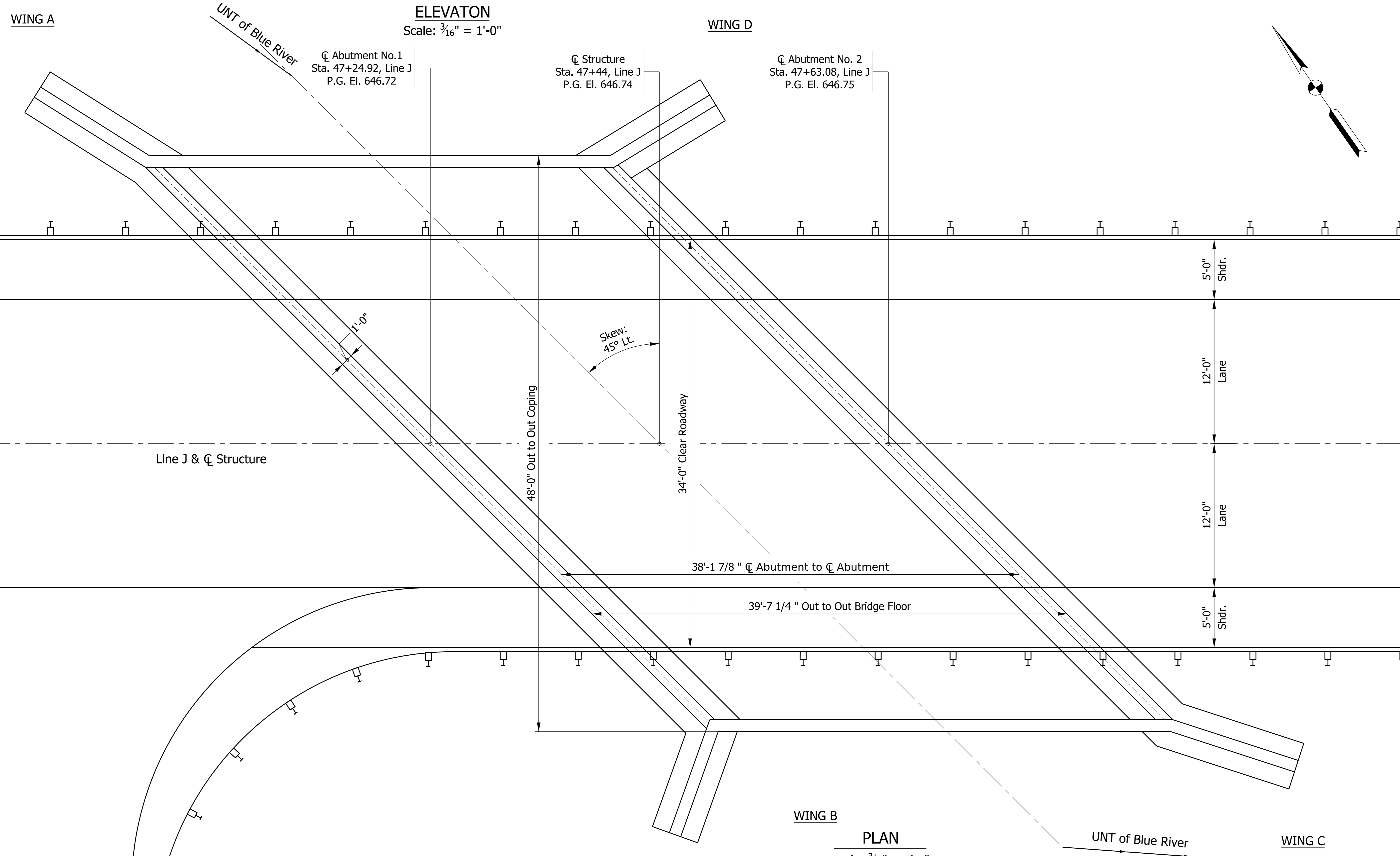
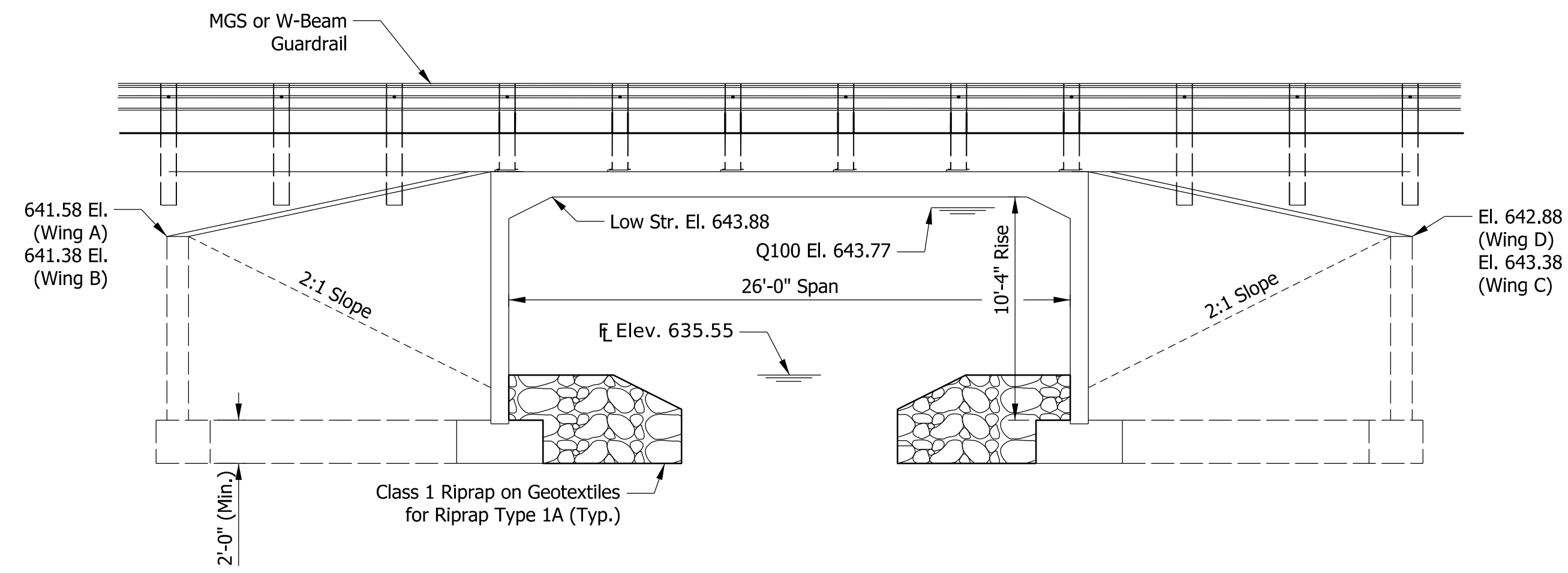
INDIANA DEPARTMENT OF TRANSPORTATION

GUARDRAIL LAYOUT

SCALE AS NOTED	BRIDGE FILE 064-31-10475
	DESIGNATION 1900066
SURVEY BOOK	SHEETS 11 of 22
CONTRACT B-42399	PROJECT 1900066

Plot: 8/31/2023 9:31 AM

File: pw:\indot-pw.bentley.com\indot-pw-01\Documents\Seymour\1900066\Design\MS\Sht Guardrail Layout Model: Line J - Guardrail Plan View [Sheet]



CAST-IN-PLACE THREE-SIDED, FLAT TOP CONCRETE STRUCTURE
 SPAN: AT 26'-0"; RISE: 10'-4",
 34'-0" CLEAR ROADWAY; 45° SKEW LT.
 SR 64 OVER UNT OF BLUE RIVER
 IN HARRISON COUNTY

DATE	REVISION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: ARS	7/2023	DRAWN: ARS
		7/2023
CHECKED: JRL	8/2023	CHECKED: JRL
		8/2023

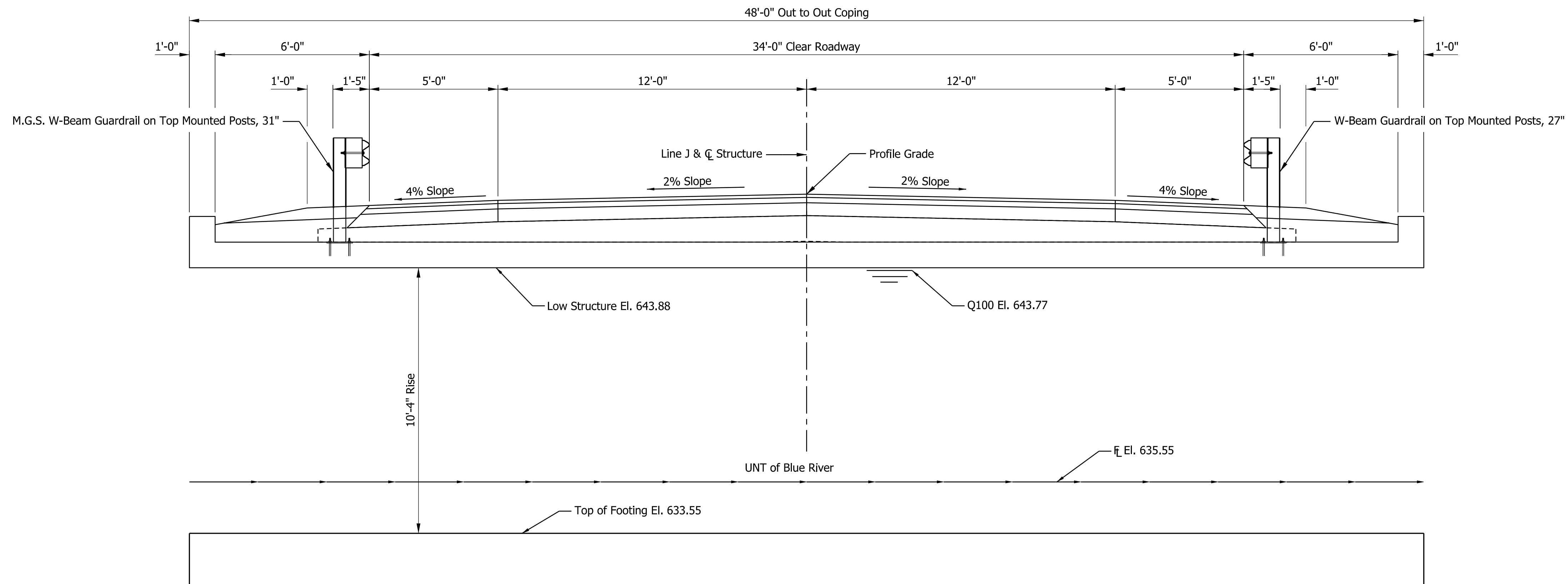
INDIANA
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

SCALE	BRIDGE FILE
AS NOTED	064-31-10475
	DESIGNATION
	1900066
	SHEETS
	12 of 22
CONTRACT	PROJECT
B-42399	1900066

PLOT: 8/31/2023 9:31 AM

File: pw:\indot-pw.bentley.com\indot-pw-01\Documents\Seymour\1900066\Design\MS\Sht General Plan Model:BR_Detail Sheet



TYPICAL SECTION

Scale: 1/4" = 1'-0"

GENERAL NOTES

Reinforcing steel cover shall be 2 1/2" in top and 1" minimum in bottom of floor slab, 3" in footings, except bottom steel which shall be 4", and 2" in all other parts, unless noted.

DESIGN DATA

Designed for HL-93 loading, in accordance with AASHTO LRFD Bridge Design Specifications, Ninth Edition, 2020.

DEAD LOAD:
Actual weight plus 35 lb/ft² for future wearing surface.

DESIGN STRESSES

CONCRETE:
Class C f_c=4,000 psi
Class B f_c=3,000 psi
Class A f_c=3,500 psi

REINFORCING STEEL:
Grade 60 f_y=60,000 psi

WIND LOAD:
Designed for 70 mph horizontal wind loading in accordance with LRFD 3.8.1

SEISMIC DESIGN DATA:
Seismic Performance Zone ???
Acceleration Coefficient ???
Seismic Soil Profile Type ???

NOTE TO REVIEWER:
Seismic Design Data will be filled out when Geotechnical Addendum is provided.

CAST-IN-PLACE THREE-SIDED, FLAT TOP CONCRETE STRUCTURE
SPAN: AT 26'-0"; RISE: 10'-4",
34'-0" CLEAR ROADWAY; 45° SKEW LT.
SR 64 OVER UNT OF BLUE RIVER
IN HARRISON COUNTY

Plot: 8/31/2023 9:31 AM

DATE	REVISION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: ARS	7/2023	DRAWN: ARS
CHECKED: JRL	8/2023	CHECKED: JRL

**INDIANA
DEPARTMENT OF TRANSPORTATION**

GENERAL PLAN - TYPICAL SECTIONS

SCALE	BRIDGE FILE
	064-31-10475
	DESIGNATION
	1900066
	SHEETS
	13 of 22
CONTRACT	PROJECT
B-42399	1900066

File: pw:\indot-pw.bentley.com\indot-pw-01\Documents\Seymour\1900066\Design\MS\Sht General Plan - Typical Section Model:BR_Detail Sheet

APPENDIX C: EARLY COORDINATION



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758-ES
Indianapolis, Indiana 46204

Eric Holcomb, Governor
Joe McGuinness, Commissioner

April 19, 2021

Sample Early Coordination Letter

David Dye
Environmental Section Manager
Indiana Department of Transportation
185 Agrico Lane
Seymour, IN 47274

Re: Early Coordination Letter, Des. No.: 1900066, SR 64 Bridge Project over Branch of Blue River, 0.11 Mile East of SR 337, Harrison County, Indiana

Dear Mr. Dye:

The Indiana Department of Transportation (INDOT), with federal funding, intends to proceed with a project involving the SR 64 bridge over Branch of Blue River (Structure # 064-31-06286A) in Depauw, Harrison County, Indiana. This letter is part of the early coordination phase of the environmental review process. We request comments from you within your area of expertise regarding any potential environmental or community effects associated with this proposed project. **Please use the above designation number and description in your reply.** We will incorporate your comments into a study of the project's environmental effects.

Project Location/Existing Conditions: This project is located on SR 64, 0.11 mile east of SR 337, in Harrison County. This section of SR 64 is a two lane Rural Major Collector. The existing SR 64 approach cross section consists of two 12-foot lanes bordered by 2-foot paved shoulders. The existing structure is a precast three-sided concrete structure with headwalls. It has a clear roadway width of 28 feet and a single span of 24 feet. The bridge was built in 1950 and is not on or eligible for inclusion on the National Register of Historic Places. There are several small spalls with exposed rebar on the west side of the slab at the west abutment. There are two spalled areas on the south end on the underside of the deck with exposed rebar. The wingwalls have cracking and scaling with efflorescence. There is an existing grated drain under the bridge that drains the surrounding area. Based on the last INDOT Bridge Inspection Report (dated October 16, 2020), the structure received a score of 5 – Moderate to major deterioration.

Purpose and Need: The draft need is due to the deterioration of the structure. The draft purpose is to maintain a safe vehicular crossing of SR 64 over Branch of Blue River.

Proposed Project: The proposed project will replace the existing bridge with a precast three-sided reinforced concrete box structure with headwalls. The proposed structure will have a single 26-foot span and 34-foot clear roadway width. Guardrail will be installed on the bridge. A portion of Branch of Blue River drainage feature south of SR 64 will be relocated outside of the proposed road slope. Riprap will be installed at the base of the

bridge and along the SR 64 road slope adjacent to the bridge. The project will be approximately 0.1 mile in length. Approximately 0.11 acre of tree clearing will be required. The project is anticipated to begin construction in Spring 2024.

Right-of-way: The project requires the acquisition of 0.81 acre of permanent right-of-way. Proposed right-of-way widths along SR 64 vary from approximately 25 feet to 90 feet from the centerline.

Maintenance of Traffic: The proposed method of traffic maintenance is anticipated to require an official state detour.

Surrounding Resources: Land use in the vicinity of the project is primarily agricultural, residential, and commercial. The project is located within the Karst Memorandum of Agreement (MOU) area and karst features were observed within the project area. HNTB Staff will perform waters and wetlands determinations to identify water resources that may be present. The project is anticipated to qualify for the Rangewide Programmatic Agreement for the Indiana bat and northern long-eared bat and the Information for Planning and Consultation (IPaC) will be completed. Coordination will occur with INDOT Cultural Resources Office (CRO) to evaluate the project area for archaeological and historic resources and for Section 106 compliance. The results of this investigation will be forwarded to the State Historic Preservation Officer (SHPO) for review and concurrence as appropriate.

Comments Request: Please provide your response within thirty (30) calendar days from the date of this letter. However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request.

If you have any questions regarding this matter, please feel free to contact Caroline Tegeler, of HNTB Corporation at ctegeler@hntb.com or Greg Prince INDOT Project Manager, at gprince@indot.in.gov or 812-524-3783. Thank you in advance for your input.

Sincerely,



Caroline Tegeler
HNTB CORPORATION

Attachments: Figure 1: Project Location Map
 Figure 2: Project Area Aerial
 Figure 3: USGS 7.5 Minute Topographic Quad Map
 Project Location Photographs
 Preliminary Plan Sheet

Attachments have been removed to avoid duplication. Graphics can be found in Appendix B.

CC: Greg Prince, INDOT Project Manager
David Dye, INDOT District Environmental Section Manager
Harold Klinstiver, Harrison County Surveyor

www.in.gov/dot/
An Equal Opportunity Employer

NextLevel
INDIANA

Nick Smith, Harrison County Sheriff
Kevin Russel, Harrison County Highway Department
Charlie Crawford, Harrison County Commissioners
Dr. Lance Richards, North Harrison Community School Corporation
Greg Reas, Harrison County Emergency Management
Natalie Garrett, Indiana Department of Transportation Seymour District Public Relations
Indiana Geological and Water Survey (Via Web Form)
Indiana Department of Environmental Management (Via Web Form)
Christie Stanifer, Indiana Department of Natural Resources, Division of Fish and Wildlife
Rick Neilson, Natural Resources Conservation Service
Deborah Snyder, US Army Corps of Engineers, Louisville District
Erica Tait, Federal Highway Administration
Robin McWilliams-Munson, US Fish and Wildlife Service
Regional Environmental Coordinator, National Park Service
Melanie Castillo, US Department of Housing & Urban Development

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife
Early Coordination/Environmental Assessment

DNR #: ER-23653

Request Received: April 19, 2021

Requestor: HNTB Corporation
Caroline Tegeler
111 Monument Circle, Suite 1200
Indianapolis, IN 46204-5178

Project: SR 64 bridge (#064-31-06286A) replacement over UNT Blue River, 0.11 mile east of SR 337, Depauw; Des #1900066

County/Site info: Harrison

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

Regulatory Assessment: This proposal will require the formal approval of our agency for construction in a floodway pursuant to the Flood Control Act (IC 14-28-1), unless it qualifies for a bridge exemption (see enclosure). Please include a copy of this letter with the permit application if the project does not meet the bridge exemption criteria.

Natural Heritage Database: The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

Fish & Wildlife Comments: Avoid and minimize impacts to fish, wildlife, and botanical resources to the greatest extent possible, and compensate for impacts. The following are recommendations that address potential impacts identified in the proposed project area:

1) Crossing Structure:

The Environmental Unit recommends bridges rather than culverts and bottomless culverts rather than box or pipe culverts. Wide culverts are better than narrow culverts, and culverts with shorter through lengths are better than culverts with longer through lengths. If box or pipe culverts are used, the bottoms should be buried a minimum of 6" (or 20% of the culvert height/pipe diameter, whichever is greater up to a maximum of 2') below the stream bed elevation to allow a natural streambed to form within or under the crossing structure. Crossings should: span the entire channel width (a minimum of 1.2 times the OHWM width); maintain the natural stream substrate within the structure; and have stream depth, channel width, and water velocities during low-flow conditions that are approximate to those in the natural stream channel.

2) Bank Stabilization:

Limit the use of riprap on the channel banks to toe protection extending up to the ordinary high water mark (ohwm); from the ohwm to the top of the banks, heavy duty erosion control blankets or turf reinforcement mats or a similar bioengineering method should be used. Erosion control blankets, turf reinforcement mats and other similar materials should be seeded with native plants to allow a natural, vegetated stream bank to develop. Do not place riprap in the bed of the channel (unless sumped across the bed to avoid creating a fish passage obstruction) and use alternative erosion protection materials whenever possible. Information about bioengineering techniques can be found at <http://www.in.gov/legislative/iac/20120404-IR-312120154NRA.xml.pdf>. Also,

Attachments: A - Bridge Exemption Criteria

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife
Early Coordination/Environmental Assessment

the following is a USDA/NRCS document that outlines many different bioengineering techniques for streambank stabilization: <http://directives.sc.egov.usda.gov/17553.wba>.

3) Riparian Habitat:

We recommend a mitigation plan be developed (and submitted with the permit application, if required) for any unavoidable habitat impacts that will occur. The DNR's Habitat Mitigation Guidelines (and plant lists) can be found online at: <http://iac.iga.in.gov/iac/20200527-IR-312200284NRA.xml.pdf>.

Impacts to non-wetland forest of one (1) acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10" dbh or greater (5:1 mitigation based on the number of large trees) or by using the 1:1 replacement ratio based on area depending on the type of habitat impacted (individual canopy tree removal in an urban streetscape or park-like environment versus removal of habitat supporting a tree canopy, woody understory, and herbaceous layer). Impacts under 0.10 acre in an urban area may still involve the replacement of large diameter trees but typically do not require any additional mitigation or additional plantings beyond seeding and stabilizing disturbed areas. There are exceptions for high quality habitat sites however.

The mitigation site should be located in the floodway, downstream of the one (1) square mile drainage area of that stream (or another stream within the 8-digit HUC, preferably as close to the impact site as possible) and adjacent to existing forested riparian habitat.

The additional measures listed below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:

1. Revegetate all bare and disturbed areas with a mixture of native grasses, sedges, wildflowers, and also native hardwood trees and shrubs if any woody plants are disturbed during construction as soon as possible upon completion. Do not use any varieties of Tall Fescue or other non-native plants, including prohibited invasive species (see 312 IAC 18-3-25).
2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.
3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.
4. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
5. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure.
6. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds.
7. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
8. Plant native hardwood trees along the top of the bank and right-of-way to replace the vegetation destroyed during construction.
9. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
10. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty,

Attachments: A - Bridge Exemption Criteria

THIS IS NOT A PERMIT

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife
Early Coordination/Environmental Assessment

biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

Contact Staff:

Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife
Our agency appreciates this opportunity to be of service. Please contact the above staff member at (317) 232-4080 if we can be of further assistance.

Christie L. Stanifer

Date: May 18, 2021

Christie L. Stanifer
Environ. Coordinator
Division of Fish and Wildlife

Attachments: A - Bridge Exemption Criteria

Caroline Tegeler

From: McWilliams, Robin <robin_mcwilliams@fws.gov>
Sent: Monday, May 10, 2021 2:57 PM
To: Caroline Tegeler
Subject: Re: [EXTERNAL] Early Coordination Letter - SR 64 Bridge Project (Des. No. 1900066)

Dear Caroline,

This responds to your recent letter requesting our comments on the aforementioned project.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The project is within the range of the Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) and should follow the new Indiana bat/northern long-eared bat programmatic consultation process, if applicable (i.e. a federal transportation nexus is established). The Service has 14 days after a "Not Likely to Adversely Affect" determination letter is generated to review the project and provide additional comments or request additional information; if you do not receive a response from us within 14 days, we have no additional comments.

The project is located within 10 miles of Critical Habitat for the Indiana bat and therefore seasonal tree-clearing should be between November 15 and March 30 to avoid the fall swarming period for bats.

Wetland and stream impacts may require permits from the US Army Corps of Engineers, the Indiana Department of Environmental Management's Water Quality Certification program, and the Indiana Department of Natural Resources. Wetland impacts should be avoided, and any unavoidable impacts should be compensated for in accordance with the Corps of Engineer's mitigation guidelines.

Based on a review of the information you provided, the U.S. Fish and Wildlife Service has no other comments on the project as currently proposed. However, should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinitiate consultation. Standard recommendations are provided below.

We appreciate the opportunity to comment at this early stage of project planning. If you have any questions about our recommendations, please call (812) 334-4261 x. 207.

Sincerely,
Robin McWilliams Munson

Standard Recommendations:

1. Do not clear trees or understory vegetation outside the construction zone boundaries. **(This restriction is not related to the "tree clearing" restriction for potential Indiana Bat habitat.)**
2. Restrict below low-water work in streams to placement of culverts, piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap.

Culverts should span the active stream channel, should be either embedded or a 3-sided or open-arch culvert, and be installed where practicable on an essentially flat slope. When an open-bottom culvert or arch is used in a stream, which has a good natural bottom substrate, such as gravel, cobbles and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community.

3. Restrict channel work and vegetation clearing to the minimum necessary for installation of the stream crossing structure.
4. Minimize the extent of hard armor (riprap) in bank stabilization by using bioengineering techniques whenever possible. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat.
5. Implement temporary erosion and sediment control methods within areas of disturbed soil. All disturbed soil areas upon project completion will be vegetated following INDOT's standard specifications.
6. Avoid all work within the inundated part of the stream channel (in perennial streams and larger intermittent streams) during the fish spawning season (April 1 through June 30), except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season. No equipment shall be operated below Ordinary High Water Mark during this time unless the machinery is within the caissons or on the cofferdams.
7. Evaluate wildlife crossings under bridge/culverts projects in appropriate situations. Suitable crossings include flat areas below bridge abutments with suitable ground cover, high water shelves in culverts, amphibian tunnels and diversion fencing

Robin McWilliams Munson
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
620 South Walker Street
Bloomington, IN 46142
812-334-4261

Mon-Tues 8-3:30p
Wed-Thurs 8:30-3p Telework

From: Caroline Tegeler <ctegeler@HNTB.com>
Sent: Monday, April 19, 2021 4:23 PM
To: McWilliams, Robin <robin_mcwilliams@fws.gov>
Cc: Kia Gillette <kgillette@HNTB.com>
Subject: [EXTERNAL] Early Coordination Letter - SR 64 Bridge Project (Des. No. 1900066)

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Dear Ms. McWilliams-Munson,

Please see the attached early coordination letter and supporting graphics for the SR 64 Bridge Project (Des. No. 1900066) in Harrison County, Indiana. If you have any questions regarding this project, please feel free to contact me by phone or email.

Thank you,



Organization and Project Information

Organization Name: HNTB

Last Name: Anton

Email: santon@hntb.com

Address Line 2: Suite 1200

State: IN

Destination Id: 1900066

Project Description: The project will replace INDOT Structure 064-31-10475-A, a pre-cast three-sided concrete structure, with a cast-in-place 3-sided flat top concrete structure, and install guardrail on the bridge.

First Name: Sharon

Phone: (317) 917-5275

Address Line 1: 111 Monument Circle

City: Indianapolis

Zip: 46204

Project Title: SR 64 Bridge Project

Environmental Assessment Report

Geological Hazards:

1. Potential Karst

Mineral Resources:

1. Bedrock Resource: Low Potential

Disclaimer:

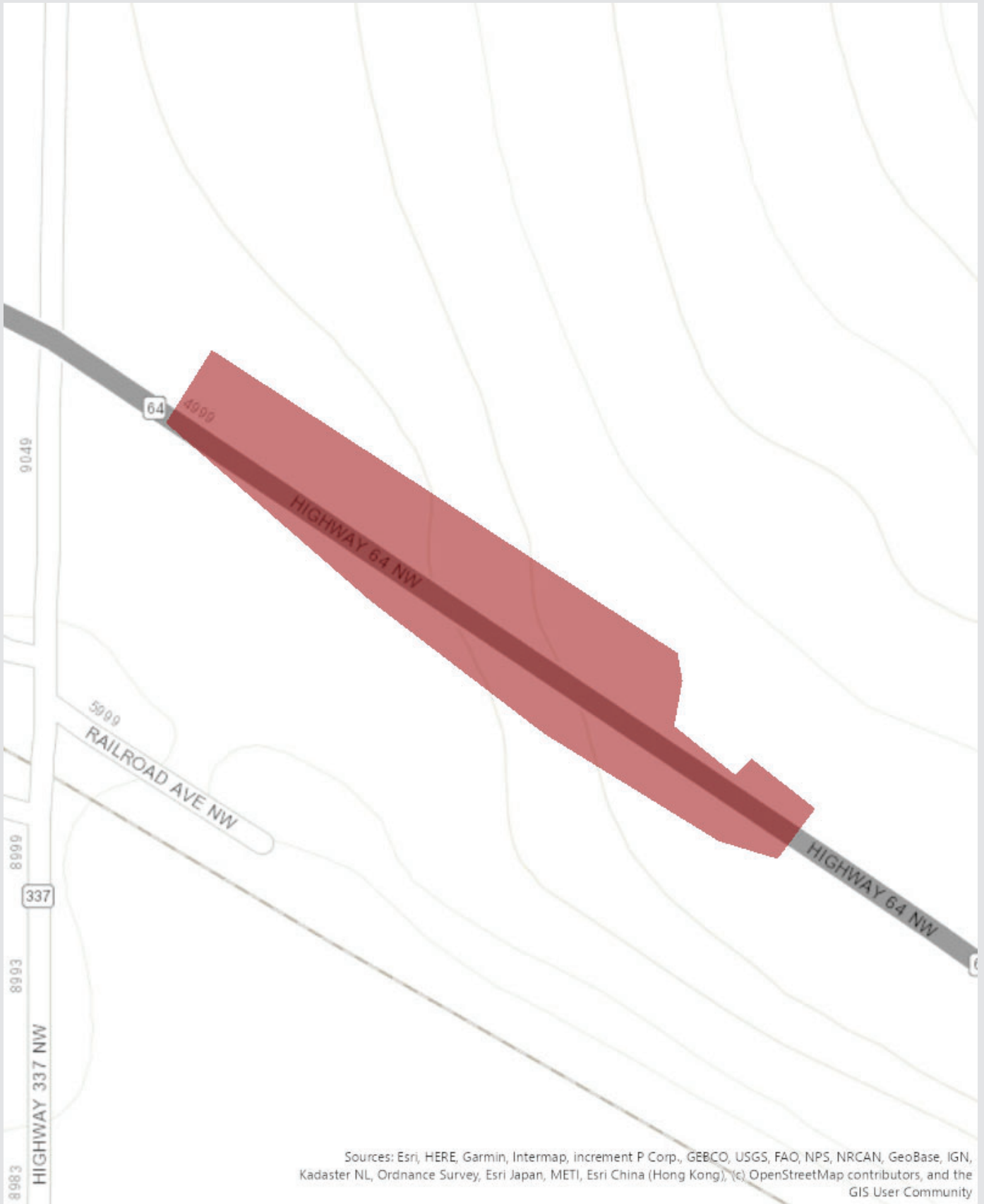
This document was compiled by Indiana University, Indiana Geological Survey, using data believed to be accurate; however, a degree of error is inherent in all data. This product is distributed "AS-IS" without warranties of any kind, either expressed or implied, including but not limited to warranties of suitability to a particular purpose or use. No attempt has been made in either the design or production of these data and document to define the limits or jurisdiction of any federal, state, or local government. The data used to assemble this document are intended for use only at the published scale of the source data or smaller (see the metadata links below) and are for reference purposes only. They are not to be construed as a legal document or survey instrument. A detailed on-the-ground survey and historical analysis of a single site may differ from these data and this document.

This information was furnished by Indiana Geological Survey

Address: 1001 E. 10th St., Bloomington, IN 47405

Email: IGSEnvir@indiana.edu

Phone: (812) 855-7428



March 26, 2024

Sharon Anton
111 Monument Circle, Suite 1200
Indianapolis, Indiana 46204

Dear Sharon Anton:

The proposed SR 64 Bridge Project over Branch of Blue River, 0.11 Mile East of SR 337, Harrison County, Indiana (Des. No. 1900066), as referred to in your letter received March 12, 2024, will cause a conversion of prime farmland.

The attached packet of information is for your use competing Parts VI and VII of the AD-1006. After completion, the federal funding agency needs to forward one copy to NRCS for our records.

If you need additional information, please contact John Allen at 317-295-5859 or john.allen@usda.gov

Sincerely,

JOHN ALLEN

JOHN ALLEN
State Soil Scientist

 Digitally signed by JOHN ALLEN
Date: 2024.03.27 07:40:48 -04'00'

Enclosers

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request				
Name of Project DES1900066 SR64 Bridge Proj over B+		Federal Agency Involved				
Proposed Land Use		County and State Harrison County, IN				
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form: JRA		
Does the site contain Prime, Unique, Statewide or Local Important Farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form)</i>		YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated	Average Farm Size	
					141 ac	
Major Crop(s) Corn	Farmable Land In Govt. Jurisdiction Acres: 194275 % 62	Amount of Farmland As Defined in FPPA Acres: 77509 % 25				
Name of Land Evaluation System Used LESA	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS 3/26/2024				
PART III (To be completed by Federal Agency)		Alternative Site Rating				
		Site A	Site B	Site C	Site D	
A. Total Acres To Be Converted Directly		1.23				
B. Total Acres To Be Converted Indirectly		0				
C. Total Acres In Site		1.62				
PART IV (To be completed by NRCS) Land Evaluation Information						
A. Total Acres Prime And Unique Farmland		0.40				
B. Total Acres Statewide Important or Local Important Farmland		0.00				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		<0.001				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		41				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)		86				
PART VI (To be completed by Federal Agency) Site Assessment Criteria <i>(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)</i>		Maximum Points	Site A	Site B	Site C	Site D
1. Area In Non-urban Use		(15)	15			
2. Perimeter In Non-urban Use		(10)	5			
3. Percent Of Site Being Farmed		(20)	1			
4. Protection Provided By State and Local Government		(20)	0			
5. Distance From Urban Built-up Area		(15)	15			
6. Distance To Urban Support Services		(15)	15			
7. Size Of Present Farm Unit Compared To Average		(10)	0			
8. Creation Of Non-farmable Farmland		(10)	0			
9. Availability Of Farm Support Services		(5)	3			
10. On-Farm Investments		(20)	15			
11. Effects Of Conversion On Farm Support Services		(10)	0			
12. Compatibility With Existing Agricultural Use		(10)	0			
TOTAL SITE ASSESSMENT POINTS		160	69	0	0	0
PART VII (To be completed by Federal Agency)						
Relative Value Of Farmland (From Part V)		100	86	0	0	0
Total Site Assessment (From Part VI above or local site assessment)		160	69	0	0	0
TOTAL POINTS (Total of above 2 lines)		260	155	0	0	0
Site Selected: A	Date Of Selection March 27, 2024	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				
Reason For Selection: The preferred alternative (Site A) was selected because it meet the purpose and need of the project to maintain a crossing on SR 64 over a UNT of Blue River.						
Name of Federal agency representative completing this form: Sharon Anton					Date: March 27, 2024	

(See Instructions on reverse side)

Form AD-1006 (03-02)

Caroline Tegeler

From: Caroline Tegeler
Sent: Friday, April 23, 2021 11:13 AM
To: 'Kevin Russel'
Cc: Kia Gillette; Glen Bube; Mel Quickmiller
Subject: RE: Early Coordination Letter - SR 64 Bridge Project (Des. No. 1900066)

Good Morning Kevin,

Thank you for reaching out with your concern about Wetzel Drive. We spoke with INDOT, and if Wetzel Drive is determined by INDOT and Harrison County to be part of the unofficial detour, then the route will be videotaped just prior to closure.

Please let me know if you have any further questions or comments.

Thank you,

Caroline Tegeler

Scientist

Tel (317)917-5352 Cell (765)212-4983 Email ctegeler@hntb.com

HNTB CORPORATION

111 Monument Circle, Suite 1200 | Indianapolis, IN 46204 | hntb.com

 **100+ YEARS OF INFRASTRUCTURE SOLUTIONS**

[Twitter](#) | [LinkedIn](#) | [Facebook](#) | [Instagram](#)

From: Kevin Russel <K.Russel@harrisoncounty.in.gov>
Sent: Monday, April 19, 2021 8:20 PM
To: Caroline Tegeler <ctegeler@HNTB.com>
Cc: Kia Gillette <kgillette@HNTB.com>; Glen Bube <G.Bube@harrisoncounty.in.gov>; Mel Quickmiller <m.quickmiller@harrisoncounty.in.gov>
Subject: RE: Early Coordination Letter - SR 64 Bridge Project (Des. No. 1900066)

Caroline,

Thank you for the opportunity to comment.

Our only concern at this time would be the likelihood of the vast majority of traffic utilizing the narrow county road, Wetzel Dr, as a detour. This is a very low volume, narrow county road and would likely not hold up well for the increased traffic. Would there be an opportunity to document the condition of this road prior to the road closure so if it is damaged it could be repaired?

Thanks,
Kevin Russel

Harrison County Highway Department
1359 Old Highway 135 SW
Corydon, Indiana 47112



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

In Reply Refer To:

04/05/2024 20:12:40 UTC

Project Code: 2024-0050541

Project Name: SR 64 Bridge Project (Des. No. 1900066)

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - <http://www.fws.gov/midwest/endangered/section7/s7process/index.html>. This website contains step-by-step instructions which will help you

determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process. For all **wind energy projects** and **projects that include installing towers that use guy wires or are over 200 feet in height**, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of

Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

Attachment(s):

- Official Species List
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Indiana Ecological Services Field Office

620 South Walker Street
Bloomington, IN 47403-2121
(812) 334-4261

PROJECT SUMMARY

Project Code: 2024-0050541
Project Name: SR 64 Bridge Project (Des. No. 1900066)
Project Type: Bridge - Replacement
Project Description: INDOT and FHWA intend to proceed with the project to replace the bridge carrying SR 64 over UNT of Blue River (Des. No. 1900066, Contract No. B-42399). INDOT Bridge 064-31-06286 A is located on SR 64, 0.11 mile east of SR 337, in Harrison County, Indiana. More specifically, this project is located in Section 17, Township 2 South, Range 3 East, as shown on the United States Geological Survey (USGS) 7.5 Depauw, Indiana Topographic Quadrangle.

INDOT proposes to replace the existing structure with a cast-in-place three-sided flat top concrete structure with a clear roadway width of 34 feet and a single span of 26 feet. Guardrail will be installed along the bridge. A portion of the UNT of Blue River drainage feature south of SR 64 will be relocated outside of the proposed road slope. This relocated drainage swale may be planted with native vegetation to filter roadside drainage. Class I riprap on geotextiles will be installed at the base of the bridge. Best management practices (BMPs) will be followed to avoid and minimize impacts to surrounding resources.

The project requires the acquisition of approximately 1.23 acres of permanent right-of-way and 0.02 acre of temporary right-of-way. Proposed right-of-way widths along SR 64 vary from approximately 25 feet to 90 feet from the centerline. Approximately 0.17 acre of tree clearing will be required. Dominant tree species in the area are American sycamore (*Platanus occidentalis*) and eastern cottonwood (*Populus deltoides*). Suitable summer habitat is located within the project area. Tree clearing will occur during the inactive bat season prior to construction. A query of the USFWS Bat Database by INDOT Environmental Services Division staff on January 12, 2021, did not identify any documented sites within 0.5 mile of the project area; however, the project is located in the 10-mile MYSO hibernacula buffer and the MYSO critical habitat. Tree clearing dates for projects located within the hibernacula buffer are from November 15 to March 30 (instead of the standard October 1 to March 30) to allow for the conclusion of fall swarming around the hibernacula. No bats or evidence of bats were observed during the October 4, 2022 field visit by HNTB.

Construction activities will increase noise above existing traffic/background levels. The project does not involve any permanent lighting modifications; however, this project will involve the use of temporary

lighting. Tree clearing is anticipated to occur in the winter of 2025, and construction is anticipated to begin in the spring of 2025.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.335632700000005,-86.21615977656371,14z>



Counties: Harrison County, Indiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME	STATUS
Whooping Crane <i>Grus americana</i> Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non- Essential

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> https://ecos.fws.gov/ecp/species/5949#crithab	Final

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

1. The [Bald and Golden Eagle Protection Act](#) of 1940.
2. The [Migratory Birds Treaty Act](#) of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

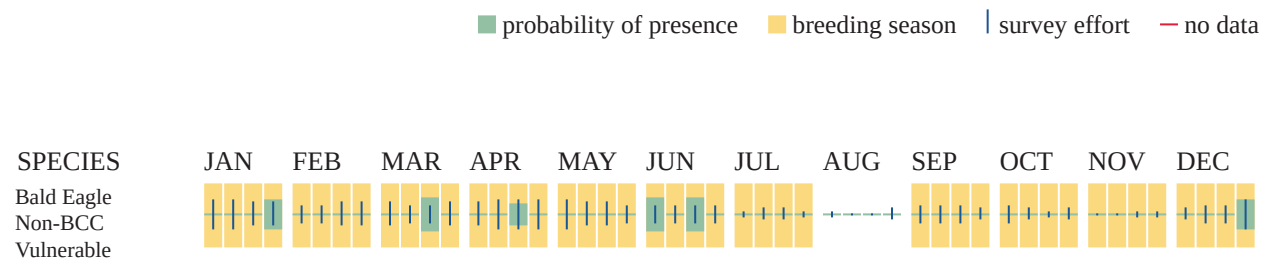
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Field Sparrow <i>Spizella pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9446	Breeds Mar 1 to Aug 15
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

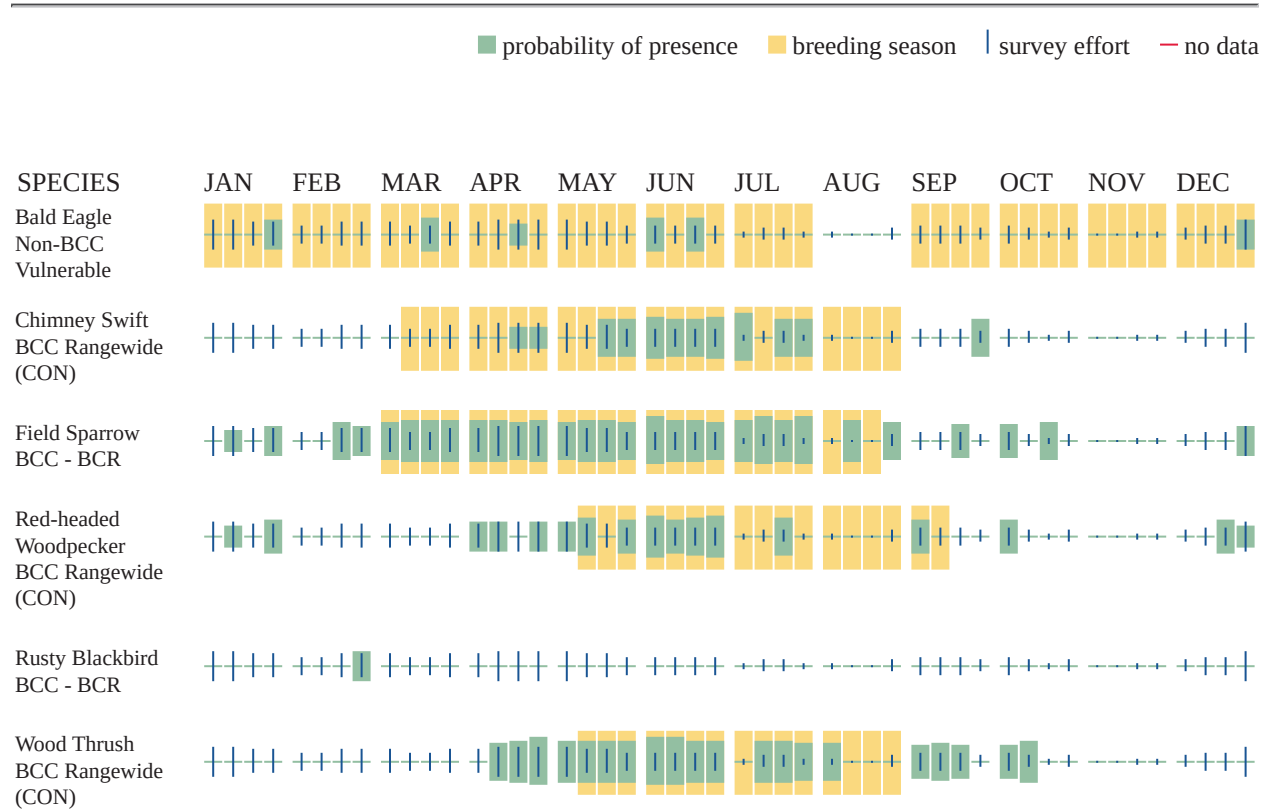
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (-)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- R4SBC

IPAC USER CONTACT INFORMATION

Agency: Indiana Department of Transportation
Name: Sharon Anton
Address: 111 Monument Circle
Address Line 2: Suite 1200
City: Indianapolis
State: IN
Zip: 46204
Email: santon@hntb.com
Phone: 3179175275

You have indicated that your project falls under or receives funding through the following special project authorities:

- BIPARTISAN INFRASTRUCTURE LAW (BIL) (OTHER)



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

In Reply Refer To:
Project code: 2024-0050541
Project Name: SR 64 Bridge Project (Des. No. 1900066)

February 23, 2024

Subject: Concurrence verification letter for the 'SR 64 Bridge Project (Des. No. 1900066)' project under the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (NLEB).

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated February 23, 2024 to verify that the **SR 64 Bridge Project (Des. No. 1900066)** (Proposed Action) may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures. **At least one of the qualification interview questions indicated an activity or portion of your project is consistent with a not likely to adversely affect determination therefore, the overall determination for your project is, may affect, and is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the endangered northern long-eared bat (*Myotis septentrionalis*).** Consultation with the Service pursuant to section 7(a)(2) of ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances,

Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities: If your initial bridge/culvert or structure assessment documented signs of bat use or occupancy, or an assessment failed to detect Indiana bats and/or NLEBs, yet are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of any potential take. In these instances, potential incidental take of Indiana bats and/or NLEBs is covered under the Incidental Take Statement in the 2018 FHWA, FRA, FTA PBO (provided that the take is reported to the Service).

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:

If your initial bridge/culvert or structure assessments failed to detect Indiana bats and/or NLEB use or occupancy, yet bats are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of the incident. In these instances, potential incidental take of Indiana bats and/or NLEBs may be exempted provided that the take is reported to the Service.

If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

The following species may occur in your project area and **are not** covered by this determination:

- Gray Bat *Myotis grisescens* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

PROJECT DESCRIPTION

The following project name and description was collected in IPaC as part of the endangered species review process.

NAME

SR 64 Bridge Project (Des. No. 1900066)

DESCRIPTION

INDOT and FHWA intend to proceed with the project to replace the bridge carrying SR 64 over UNT of Blue River (Des. No. 1900066, Contract No. B-42399). INDOT Bridge 064-31-06286 A is located on SR 64, 0.11 mile east of SR 337, in Harrison County, Indiana. More specifically, this project is located in Section 17, Township 2 South, Range 3 East, as shown on the United States Geological Survey (USGS) 7.5 Depauw, Indiana Topographic Quadrangle.

INDOT proposes to replace the existing structure with a cast-in-place three-sided flat top concrete structure with a clear roadway width of 34 feet and a single span of 26 feet. Guardrail will be installed along the bridge. A portion of the UNT of Blue River drainage feature south of SR 64 will be relocated outside of the proposed road slope. This relocated drainage swale may be planted with native vegetation to filter roadside drainage. Class I riprap on geotextiles will be installed at the base of the bridge. Best management practices (BMPs) will be followed to avoid and minimize impacts to surrounding resources.

The project requires the acquisition of approximately 1.23 acres of permanent right-of-way and 0.02 acre of temporary right-of-way. Proposed right-of-way widths along SR 64 vary from approximately 25 feet to 90 feet from the centerline. Approximately 0.17 acre of tree clearing will be required. Dominant tree species in the area are American sycamore (*Platanus occidentalis*) and eastern cottonwood (*Populus deltoides*). Suitable summer habitat is located within the project area. Tree clearing will occur during the inactive bat season prior to construction. A query of the USFWS Bat Database by INDOT Environmental Services Division staff on January 12, 2021, did not identify any documented sites within 0.5 mile of the project area; however, the project is located in the 10-mile MYSO hibernacula buffer and the MYSO critical habitat. Tree clearing dates for projects located within the hibernacula buffer are from November 15 to March 30 (instead of the standard October 1 to March 30) to allow for the conclusion of fall swarming around the hibernacula. No bats or evidence of bats were observed during the October 4, 2022 field visit by HNTB.

Construction activities will increase noise above existing traffic/background levels. The project does not involve any permanent lighting modifications; however, this project will involve the use of temporary lighting. Tree clearing is anticipated to occur in the winter of 2025, and construction is anticipated to begin in the spring of 2025.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.335632700000005,-86.21615977656371,14z>



DETERMINATION KEY RESULT

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the endangered northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

QUALIFICATION INTERVIEW

1. Is the project within the range of the Indiana bat^[1]?

[1] See [Indiana bat species profile](#)

Automatically answered

Yes

2. Is the project within the range of the northern long-eared bat^[1]?

[1] See [northern long-eared bat species profile](#)

Automatically answered

Yes

3. Which Federal Agency is the lead for the action?

A) *Federal Highway Administration (FHWA)*

4. Are *all* project activities limited to non-construction^[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

[1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces^[1]?

[1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum^[1]?

[1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

7. Is the project located **within** a karst area?

Yes

8. Will the project include *any* type of activity that could impact a **known** hibernaculum^[1], or impact a karst feature (e.g., sinkhole, losing stream, or spring) that could result in effects to a **known** hibernaculum?

[1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

9. Is there *any* suitable^[1] summer habitat for Indiana Bat or NLEB **within** the project action area^[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the [User's Guide for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat](#).

Yes

10. Will the project remove *any* suitable summer habitat^[1] and/or remove/trim any existing trees **within** suitable summer habitat?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

Yes

11. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

No

12. Have presence/probable absence (P/A) summer surveys^{[1][2]} been conducted^{[3][4]} **within** the suitable habitat located within your project action area?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

[3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

[4] Negative presence/probable absence survey results obtained using the [summer survey guidance](#) are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

No

13. Does the project include activities **within documented Indiana bat habitat**^{[1][2]}?

[1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

[2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

No

14. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors?

Yes

15. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors occur^[1]?

[1] Coordinate with the local Service Field Office for appropriate dates.

B) During the inactive season

16. Does the project include activities **within documented NLEB habitat**^{[1][2]}?

[1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

[2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

No

17. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors?

Yes

18. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors occur?

B) During the inactive season

19. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

Yes

20. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

No

21. Are *all* trees that are being removed clearly demarcated?
Yes
22. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?
No
23. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?
No
24. Does the project include slash pile burning?
No
25. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?
Yes
26. Is there *any* suitable habitat^[1] for Indiana bat or NLEB **within** 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's current [summer survey guidance](#) for our current definitions of suitable habitat.

Yes

27. Has a bridge assessment^[1] been conducted **within** the last 24 months^[2] to determine if the bridge is being used by bats?

[1] See [User Guide Appendix D](#) for bridge/structure assessment guidance

[2] Assessments must be completed no more than 2 years prior to conducting any work below the deck surface on all bridges that meet the physical characteristics described in the Programmatic Consultation, regardless of whether assessments have been conducted in the past. Due to the transitory nature of bat use, a negative result in one year does not guarantee that bats will not use that bridge/structure in subsequent years.

Yes

SUBMITTED DOCUMENTS

- 20221004_INDOT_Bridge_Culvert_Assessment_Form_1900066.pdf <https://ipac.ecosphere.fws.gov/project/QKRG2JQZHZN5E5XOUC2AQFYPU/projectDocuments/138833703>

28. Did the bridge assessment detect *any* signs of Indiana bats and/or NLEBs roosting in/under the bridge (bats, guano, etc.)^[1]?

[1] If bridge assessment detects signs of *any* species of bats, coordination with the local FWS office is needed to identify potential threatened or endangered bat species. Additional studies may be undertaken to try to identify which bat species may be utilizing the bridge prior to allowing *any* work to proceed.

Note: There is a small chance bridge assessments for bat occupancy do not detect bats. Should a small number of bats be observed roosting on a bridge just prior to or during construction, such that take is likely to occur or does occur in the form of harassment, injury or death, the PBO requires the action agency to report the take. Report all unanticipated take within 2 working days of the incident to the USFWS. Construction activities may continue without delay provided the take is reported to the USFWS and is limited to 5 bats per project.

No

29. Will the bridge removal, replacement, and/or maintenance activities include installing new or replacing existing **permanent** lighting?

No

30. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

No

31. Will the project involve the use of **temporary** lighting *during* the active season?

Yes

32. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting will be used?

Yes

33. Will the project install new or replace existing **permanent** lighting?

No

34. Does the project include percussives or other activities (**not including tree removal/trimming or bridge/structure work**) that will increase noise levels above existing traffic/background levels?

No

35. Are *all* project activities that are **not associated with** habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

Examples: lining roadways, unlighted signage, rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

Yes

36. Will the project raise the road profile **above the tree canopy**?

No

37. Are the project activities that are not associated with habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives consistent with a No Effect determination in this key?

Automatically answered

Yes, other project activities are limited to actions that DO NOT cause any additional stressors to the bat species as described in the BA/BO

38. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answered

Yes, because the tree removal/trimming that occurs outside of the Indiana bat's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

39. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answered

Yes, because the tree removal/trimming that occurs outside of the NLEB's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

40. Is the bridge removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

Automatically answered

Yes, because the bridge has been assessed using the criteria documented in the BA and no signs of bats were detected

41. **General AMM 1**

Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

Yes

42. **Hibernacula AMM 1**

Will the project ensure that on-site personnel will use best management practices^[1], secondary containment measures, or other standard spill prevention and countermeasures to avoid impacts to possible hibernacula?

[1] Coordinate with the appropriate Service Field Office on recommended best management practices for karst in your state.

Yes

43. **Hibernacula AMM 1**

Will the project ensure that, where practicable, a 300 foot buffer will be employed to separate fueling areas and other major containment risk activities from caves, sinkholes, losing streams, and springs in karst topography?

Yes

44. **Tree Removal AMM 1**

Can *all* phases/aspects of the project (e.g., temporary work areas, alignments) be modified, to the extent practicable, to avoid tree removal^[1] in excess of what is required to implement the project safely?

Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented and LAA as long as Tree Removal AMMs 3, 5, 6, and 7 are implemented.

[1] The word “trees” as used in the AMMs refers to trees that are suitable habitat for each species within their range. See the USFWS’ current summer survey guidance for our latest definitions of suitable habitat.

Yes

45. **Tree Removal AMM 3**

Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

Yes

46. **Tree Removal AMM 4**

Can the project avoid cutting down/removal of *all* (1) **documented**^[1] Indiana bat or NLEB roosts^[2] (that are still suitable for roosting), (2) trees **within** 0.25 miles of roosts, and (3) documented foraging habitat any time of year?

[1] The word documented means habitat where bats have actually been captured and/or tracked.

[2] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

Yes

47. **Lighting AMM 1**

Will *all* **temporary** lighting be directed away from suitable habitat during the active season?

Yes

PROJECT QUESTIONNAIRE

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

No

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

Yes

3. How many acres^[1] of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

[1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

0.17

4. Please describe the proposed bridge work:

Replace the existing structure with a cast-in-place three-sided flat top concrete structure with a clear roadway width of 34 feet and a single span of 26 feet. Guardrail will be installed along the bridge.

5. Please state the timing of all proposed bridge work:

spring 2025

6. Please enter the date of the bridge assessment:

10/4/2022

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

This determination key result includes the commitment to implement the following Avoidance and Minimization Measures (AMMs):

HIBERNACULA AMM 1

For projects located within karst areas, on-site personnel will use best management practices, secondary containment measures, or other standard spill prevention and countermeasures to avoid impacts to possible hibernacula. Where practicable, a 300 foot buffer will be employed to separate fueling areas and other major containment risk activities from caves, sinkholes, losing streams, and springs in karst topography.

TREE REMOVAL AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

LIGHTING AMM 1

Direct temporary lighting away from suitable habitat during the active season.

TREE REMOVAL AMM 2

Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.

TREE REMOVAL AMM 3

Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

TREE REMOVAL AMM 4

Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or **documented** foraging habitat any time of year.

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

DETERMINATION KEY DESCRIPTION: FHWA, FRA, FTA PROGRAMMATIC CONSULTATION FOR TRANSPORTATION PROJECTS AFFECTING NLEB OR INDIANA BAT

This key was last updated in IPaC on October 30, 2023. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the endangered **northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's [amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion \(dated March 23, 2023\) for Transportation Projects](#). The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

IPAC USER CONTACT INFORMATION

Agency: Indiana Department of Transportation

Name: Taylor Schwering

Address: 185 Agrico Lane

City: Seymour

State: IN

Zip: 47201

Email: tschwering@indot.in.gov

Phone: 8127160748

INDOT Bridge/Small Structure Bat Inspection Data Sheet (Rev 4/29/2016)

General Information		
Date of Inspection: 10/04/2022	Initial Inspection <input type="checkbox"/>	Temp: 59 °F
Time of Inspection: 12:43 pm	Follow-up Inspection <input checked="" type="checkbox"/>	Wind: 10 mph
County: Harrison	Construction <input type="checkbox"/>	Precip: 0
Inspected by: C. Tegeler, D. Logsdon		Sunrise: 7:42 Sunset: 7:23
GPS Northing: 4243332.75	Contract Number:	Anticipated Start Date for Construction: Spring 2025 (tree clearing winter 2025)
Easting: 568520.83	B-42399, Des. No. 1900066	
UTM Zone: 16		

Bridge or Culvert	Bridge or Culvert
Stream or Road Crossed: SR 64 over UNT of Blue River	Station: RP 47+44
Bridge/Culvert number: 064-31-06286 A	Number of Spans: 1
Type of Structure: <input type="checkbox"/> Concrete box beam <input type="checkbox"/> Steel beam <input type="checkbox"/> Concrete I-beam <input type="checkbox"/> Steel girder <input type="checkbox"/> Concrete bulb tee beam <input type="checkbox"/> Steel pony truss <input type="checkbox"/> Concrete arch <input type="checkbox"/> Welded steel thru girder <input type="checkbox"/> Concrete girder <input type="checkbox"/> Concrete box culvert <input checked="" type="checkbox"/> Concrete slab <input type="checkbox"/> Concrete pipe <input type="checkbox"/> Multi-plate arch <input type="checkbox"/> Corrugated steel pipe <input type="checkbox"/> Other (list):	Material: <input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Steel <input type="checkbox"/> Other (describe): Shape: <input type="checkbox"/> Box Culvert <input type="checkbox"/> Pipe <input type="checkbox"/> Arch <input checked="" type="checkbox"/> Slab <input type="checkbox"/> Other (describe)
Searched entire structure? If not, why not? Yes	Location of bats or signs of use (w/drawing and photos): N/A
Bats Present? <input type="checkbox"/> Seen? <input type="checkbox"/> Heard? No	
In Clusters? Number of clusters: N/A	
Number of bats in largest cluster: N/A	
Approximate total number of bats found: N/A	
Signs of previous bat use? <input type="checkbox"/> Guano <input type="checkbox"/> Staining No	

If Bats Present
Date and Time Project Supervisor was notified: N/A
Name of Project Supervisor notified: N/A



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758-ES
Indianapolis, Indiana 46204

PHONE: (317)233-0800
(855) INDOT4U

Eric J. Holcomb, Governor
Michael Smith, Commissioner

February 26, 2024

Ms. Robin McWilliams Munson
US Fish and Wildlife Service
Bloomington Indiana Field Office
620 South Walker Street
Bloomington, IN 47403

Via E-mail: Robin_Mcwilliams@fws.gov

Re: Standard Informal Consultation/Conference Letter for the Gray Bat
Des. No. 1900066
SR 64 Bridge Project, 0.11 Mile East of SR 337
Harrison County, Indiana

Dear Ms. McWilliams Munson:

The Indiana Department of Transportation (INDOT), acting on behalf of the Federal Highway Administration (FHWA), is submitting this letter for standard informal consultation for the gray bat (*Myotis grisescens*) for the SR 64 bridge project.

The Rangewide Programmatic Agreement will be used for the federally endangered Indiana bat (*Myotis sodalis*) and Northern long-eared bat (*Myotis septentrionalis*) (NLEB). The official species list generated for this project also indicated that the following species may occur within the boundary of this project and/or may be affected by the proposed project:

- Tricolored bat (*Perimyotis subflavus*), proposed endangered
- Whooping crane (*Grus americana*), Experimental Population, Non-Essential
- Monarch butterfly (*Danaus plexippus*), Candidate

The project is within the range of the tricolored bat (TCB). It is anticipated the project will use the revised Rangewide Programmatic Agreement for the TCB once the listing becomes effective.

There are currently no statutory protections for these species. Therefore, no additional coordination is required at this time.

Background

INDOT, with funding from FHWA, is planning to proceed with a bridge replacement project on SR 64, 0.11 mile east of SR 337 in the community of Depauw, Blue River Township, Harrison County, Indiana. It is within Sections 17 and 20 in Township 2 South, Range 3 East, in the Depauw Quadrangle of the Indiana 7.5 Minute USGS Topographic Series.

Existing Conditions

The existing bridge, INDOT Structure No. 064-31-06286A, is a precast, three-sided concrete structure with 24-foot single span and 28-foot clear roadway width. The SR 64 approach cross section consists of two 12-foot lanes bordered by 2-foot paved shoulders. The existing bridge was constructed in 1950 and scour protection rehabilitation work was completed in

www.in.gov/dot/
**An Equal Opportunity
Employer**



2011. According to the INDOT Bridge Inspection Report dated October 11, 2022, the structure is in fair condition and is rated 5 (moderate to major deterioration) out of 9 (no deficiencies).

Proposed Project

The project proposes to replace the existing structure with a cast-in-place three-sided flat top concrete structure with a single span of 26 feet and a clear roadway width of 34 feet. Guardrail will be installed along the bridge. A portion of the UNT of Blue River drainage feature south of SR 64 will be relocated outside of the proposed road slope. This relocated drainage swale may be planted with native vegetation to filter roadside drainage. Class I riprap on geotextiles will be installed at the base of the bridge. Best management practices (BMPs) will be followed to avoid and minimize impacts to surrounding resources.

The project requires the acquisition of approximately 1.23 acres of permanent right-of-way and 0.02 acre of temporary right-of-way. Proposed right-of-way widths along SR 64 vary from approximately 25 feet to 90 feet from the centerline.

Existing Habitat

A review of the US Fish and Wildlife Service (USFWS) GIS bat database by INDOT Seymour District on January 12, 2021, did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. However, the project is located in the 10-mile MYSO hibernacula buffer and the MYSO critical habitat. The US Fish and Wildlife Service (USFWS) responded to early coordination on May 10, 2021, confirming the project location within the 10-mile MYSO hibernacula and critical habitat buffer, and stating that tree clearing should occur between November 15 and March 30 to avoid the fall swarming period for bats.

The Indiana Department Natural Resources (IDNR), Division of Fish & Wildlife (DFW) responded to early coordination on May 18, 2021. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

Suitable habitat for the gray bat exists within and adjacent to the project area. Dominant tree species included American sycamore (*Platanus occidentalis*) and eastern cottonwood (*Populus deltoides*). There are no documented gray bat hibernacula or maternity colonies within the project area. An inspection of INDOT Structure 064-31-06286A on October 4, 2022, by HNTB, did not find any evidence of bats using the structure.

A karst field survey was conducted on December 21, 2021, by Hydrogeology, Inc. There is a large sinking stream basin in the area, SS-1 and based on historic dye traces it may be part of the drainage area for Harrison Spring. Two features associated with SS-1 are located within the construction limits of this project: Sinkhole SH-5 and Swallet SW-1.

- SH-5: Sinkhole SH-5 is 105 feet long, 75 feet wide, and 8 feet deep, and has two swallets in the bottom. The sinkhole bottom is filled with trash and organic debris. The sinkhole is within the construction limits and 20 feet southwest of existing SR-64. SH-5 is the terminal sinkhole of SS-1.
- SW-1: Swallet SW-1 is located below the existing structure under SR 64. The swallet has a vertical corrugated pipe placed within it, which is mostly filled with sediment. Soil openings have developed around the corrugated pipe. No documentation on the original design of this drainage structure was available for review. Based on available LIDAR data it appears approximately 50 feet on both sides of SR 64 drains toward SW-1. No evidence of water ponding was observed around SW-1.

Impacts

Up to 0.17 acre of tree clearing is anticipated to be required for this project. Tree clearing will occur during the inactive bat season prior to construction.

No likely jurisdictional wetlands or streams were observed during the field investigations conducted July 23, 2020, October 26, 2020, and October 4, 2022. Therefore, no impacts to wetlands or streams are anticipated.

Two karst features, SH-5 and SW-1, are within the proposed construction limits for the project. Proposed mitigation measures regarding these karst features are as follows:

- SH-5: A karst expert will be present during any excavation work near SH-5. Natural drainage should be allowed to continue to flow into SH-5. If necessary, an offset structure will be used to perpetuate flow into the sinkhole.
- SW-1: This swallet appears to drain water from both sides of SR 64. Allowing SW-1 to continue functioning as a drain is likely a better alternative than attempting to divert drainage from the swallet. An improved vertical drainage structure with filtration should replace the existing pipe as it is blocked with sediment. The new drainage structure for SW-1 should be sized appropriately based on drainage calculations.
- During construction and until re-vegetation has occurred, erosion and sediment control measures should be in place within the construction limits to protect SH-5 and SW-1.
- To help reduce the amount of stormwater contaminants entering SH-5 and SW-1, permanent stormwater Post-Construction Stormwater Measures (PCSMs) will be constructed on the south side of the road. Dry turf grass swale will be installed near the residence and dry native grass swale will be installed near the existing pasture and wooded area. The swales are included on the south side of the road because that is where the widening will occur.

Commitments

Most of the following avoidance and minimization measures (AMMs) were generated during the Informal Planning and Consultation (IPaC) process for the Indiana bat and the NLEB. These AMMs will also benefit the gray bat and the TCB. Commitments 9 and 10 were added due to the presence of karst features in the study area.

1. Hibernacula AMM 1. For projects located within karst areas, on-site personnel will use best management practices, secondary containment measures, or other standard spill prevention and countermeasures to avoid impacts to possible hibernacula. Where practicable, a 300 foot buffer will be employed to separate fueling areas and other major containment risk activities from caves, sinkholes, losing streams, and springs in karst topography.
2. General AMM 1. Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.
3. Lighting AMM 1. Direct temporary lighting away from suitable habitat during the active season.
4. Tree Removal AMM 1. Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to the extent practicable to avoid tree removal in excess of what is required to implement the project safely.
5. Tree Removal AMM 2. Apply time of year (November 15 to March 30) restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and outside of documented roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.
6. Tree Removal AMM 3. Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).
7. Tree Removal AMM 4. Do not remove documented Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or documented foraging habitat any time of year.
8. USFWS Bridge/Structure Assessment shall take place no earlier than 2 (two) years prior to the start of construction. If construction will begin after October 4, 2024, an inspection of INDOT Structure No. 064-31-06286A by a qualified individual, must be performed. Inspection of the structure should check for presence of bats/bat indicators

and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contracted immediately.

9. If unknown karst features are discovered during construction, all work within 100 ft of the feature shall stop and the Engineer shall be notified immediately. Karst features include, but are not limited to voids, caves, sinking streams, and sinkholes. The Department will provide the treatment measures to be incorporated for the feature. The karst feature shall be protected from sedimentation runoff. Work shall not resume in the area until directed by the Engineer.
10. Work near karst features SH-5 and SW-1 will be monitored by a karst expert during construction.

Effect Findings/Conclusion

The FHWA is requesting USFWS concurrence with the following project effect determinations:

Gray Bat

Approximately 0.17 acre of tree removal will occur, all of which is within 100 feet of an existing road. The impacts to gray bat foraging areas will be minimal and occur when the bat is not present. There are no maternity colonies or hibernacula within or near the project area.

Karst features, SH-5 and SW-1, will be impacted during construction. These features will be monitored by a karst expert during construction so the appropriate treatments can be installed. During construction and until re-vegetation has occurred, erosion and sediment control measures will be in place within the construction limits to protect SH-5 and SW-1. PCSMs will be installed to treat stormwater draining to these karst features.

Based on the review of existing data, assessment of likely suitable summer habitat, tree clearing quantities, and commitments, the FHWA has determined the proposed project has an effect finding of “Not Likely to Adversely Affect” for the federally endangered gray bat.

Please contact Sharon Anton at HNTB at santon@hntb.com or 317-917-5275 or Jenni Curry at JCurry1@indot.IN.gov or 317-503-8207 if you have any questions or require additional information. We appreciate your attention to this project.

Sincerely,

Jennifer Curry
Team Lead, Ecology and Waterway Permitting
Indiana Department of Transportation

Attachments:

- Project Location Map (Attachment Page 1)
- USGS (1:24,000 scale) Topographic Map (Attachment Page 2)
- Project Aerial Map (Attachment Page 3)
- Project Photo Map and Photos (Attachment Pages 4-7)
- Structure Inspection Information (Attachment Page 8)
- Agency Coordination (Attachment Pages 9-13)
- IPaC Species List (Attachment Pages 14-26)
- Draft Project Plans (Excerpt) (Pages 27-28)

Attachments have been removed to avoid duplication. Graphics can be found in Appendix B.

Cc: Greg Prince, INDOT Project Manager
Kia Gillette, HNTB Environmental Project Manager
Justus McGill, INDOT Ecology & Waterway Permitting

www.in.gov/dot/
An Equal Opportunity Employer



From: McWilliams, Robin <robin_mcwilliams@fws.gov>
Sent: Tuesday, March 26, 2024 10:33 AM
To: Sharon Anton
Subject: Re: [EXTERNAL] Des 1900066, SR 64 Bridge Project, Harrison County, IN - Standard Informal Consultation for the Gray Bat

External Email: Use caution when clicking on links, replying, or opening attachments.

Dear Sharon,

Sorry for the delay on this. We prepared these comments under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.), the Endangered Species Act of 1973 (Act), and the U.S. Fish and Wildlife Service's Mitigation Policy.

Based on the information we have reviewed, including the proposed avoidance and minimization measures such as seasonal tree-clearing activities, karst best management practices, and lighting restrictions, we concur that the proposed project is not likely to adversely affect the gray bat.

Other species

Tricolored Bat

On September 14, 2022, the Service published a proposal in the Federal Register to list the tricolored bat (*Perimyotis subflavus*; TCB) as endangered under the ESA. The Service has up to 12 months from the date the proposal was published to make a final determination, either to list the tricolored bat under the ESA or to withdraw the proposal. The Service determined the bat faces extinction primarily due to the range-wide impacts of White Nose Syndrome (WNS). Because TCB populations have been greatly reduced due to WNS, surviving bat populations are now more vulnerable to other stressors such as human disturbance and habitat loss. Species proposed for listing are not afforded protection under the ESA; however, as soon as a listing becomes effective (typically 30 days after publication of the final rule in the Federal Register), the prohibitions against jeopardizing its continued existence and “take” will apply. Therefore, if this project or other future or existing projects have the potential to adversely affect the TCB after the potential new listing goes into effect, we recommend that the effects of the project on TCBs and their habitat be analyzed to determine whether authorization under ESA section 7 or 10 is necessary. Projects or programs with an existing section 7 biological opinion may require reinitiation of consultation, and projects with an existing section 10 incidental take permit may require an amendment to provide uninterrupted authorization for covered activities.

The TCB is a small insectivorous bat that typically overwinters in caves, abandoned mines and tunnels, and road-associated culverts (southern portion of the range) and spends the

rest of the year in forested habitats, typically roosting among live and dead leaf clusters in tree branches. For more information on TCB and the proposed rule, please see: <https://www.fws.gov/species/tricolored-bat-perimyotis-subflavus> and for more information on WNS, please see: <https://www.whitenosesyndrome.org/>.

We do not expect impacts to the tri-colored bat as a result of project activities.

This precludes the need for further consultation on this project as required under section 7 of the ESA. If, however, new information on endangered species or the extent of impacts at the site becomes available, or if project plans are changed significantly, please contact our office for further consultation.

We appreciate the opportunity to comment at this stage of project planning.

Sincerely,
Robin

Robin McWilliams Munson
Fish and Wildlife Biologist/Transportation Liaison
U.S. Fish and Wildlife Service
Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403
Robin_McWilliams@fws.gov
***NEW* 812-902-1752**

Mon-Tues 8:30-4:30p
Wed-Thurs 8:30-4:30p Telework

From: Sharon Anton <santon@HNTB.com>
Sent: Monday, February 26, 2024 3:30 PM
To: McWilliams, Robin <robin_mcwilliams@fws.gov>
Cc: Curry, Jennifer <JCurry1@indot.IN.gov>; Kia Gillette <kgillette@HNTB.com>; gprince@indot.in.gov <gprince@indot.in.gov>; jmcgill@indot.in.gov <jmcgill@indot.in.gov>
Subject: [EXTERNAL] Des 1900066, SR 64 Bridge Project, Harrison County, IN - Standard Informal Consultation for the Gray Bat

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Good afternoon, Robin,

From: McGill, Justus <JMcgill@indot.IN.gov>
Sent: Thursday, March 7, 2024 2:28 PM
To: Buffington, Matt; McWilliams, Robin; JOHANSON, SCOTT; JOHANSON, SCOTT
Cc: Curry, Jennifer
Subject: Karst Features Along Des 1900066 SR 64 Bridge Replacement Harrison County
Attachments: [Des 1900066 Approved Karst Report ES 3.7.24.pdf](#); [Des 1900066 Approved Karst Swale Design Report ES 1.18.24.pdf](#)

Hello Agencies,

Following the steps outlined in the INDOT karst procedure, I am providing two documents for your review. The documents, a karst report and karst swale design report, are associated with a small structure replacement project on SR 64 in Harrison County near Depauw. Comments are not expected but will be taken into consideration. A summary of the identified karst features and the proposed protection of these features are provided below. Should you have any questions please contact me.

Project Summary

The Indiana Department of Transportation (INDOT) is proposing to replace the bridge along SR 64, 0.11 miles east of SR 337. The existing bridge is a precast three-sided concrete structure with a 24-foot single span and 28-foot clear roadway width. The existing structure will be replaced with a precast three-sided reinforced concrete box structure with headwalls. Hydrogeology, Inc. completed a karst survey for the project area and identified two karst features, SH-5, and SW-1, within the construction limits. SH-1 through SH-4, SH-6, and SH-7 are located outside of the construction limits and will not be impacted.

To help reduce the amount of stormwater contaminants entering the two karst features, permanent stormwater Post-Construction Stormwater Measures (PCSMs) are proposed as part of the bridge replacement project. Treatment of SW-1 will replace the existing drainpipe with a new in-kind pipe. Riprap will be included for additional filtration. SH-5 will be treated with a water-quality treatment swale design to remove total suspended solids from entering the sinkhole. During construction and until re-vegetation has occurred, erosion and sediment control measures will be in place to protect SW-1 and SH-5.

There have been some minor changes to the project since the early coordination letter was sent to resource agencies on April 21, 2021. The early coordination letter stated the project would require the acquisition of 0.81 acre of permanent right-of-way and approximately 0.11 acre of tree clearing would be required. The letter also stated construction was anticipated to begin in Spring 2024. The project will now require 1.23 acres of permanent and 0.02 acres of temporary right-of-way. It will now require up to 0.17 acre of tree clearing and construction is anticipated to begin in Spring 2025.

Thanks,

Justus McGill, WPIT

Ecology, Waterway Permitting, & Stormwater Office
100 N Senate Ave. Indianapolis Rm N758-ES, IN 46204

Office: (317)-509-7296

Email: jmcgill@indot.in.gov

APPENDIX D: SECTION 106 OF NHPA

Minor Projects PA Project Assessment Form

Date: 10/4/2023

Amended Date: 4/2/2024

Project Designation Number: 1900066

Route Number: State Road (SR) 64

Project Description: Bridge Project over Branch Blue River; 0.11 mile east of SR 337

The Federal Highway Administration (FHWA) and Indiana Department of Transportation (INDOT), Seymour District propose to proceed with replacement of the SR 64 bridge over Branch Blue River in the community of Depauw, Blue River Township, Harrison County. The project is located on SR 64, approximately 0.11 mile east of SR 337.

The existing structure (#064-31-06286A/NBI # 023130) is a precast, three-sided concrete structure with 24-foot single span and 28-foot clear roadway width. The existing structure will be replaced with a **cast-in-place** three-sided **flat top** concrete structure **with a clear roadway width of 34 feet and a single span of 26 feet**. Guardrail will be installed **along** the bridge. A portion of the **Unnamed Tributary (UNT)** of Blue River drainage feature south of SR 64 will be relocated outside of the proposed road slope. This relocated drainage swale may be planted with native vegetation to filter roadside drainage before it enters a karst feature. **Class I riprap on geotextiles** will be installed at the base of the bridge.

Approximately **1.23 acres** of **permanent** right-of-way (ROW) and **0.02 acre of temporary ROW** will be required for the project.

Feature crossed (if applicable): **UNT** of Blue River

City/Township: Depauw/Blue River Township

County: Harrison County

Information reviewed (please check all that apply):

- General project location map USGS map Aerial photograph Interim Report
- Written description of project area General project area photos Soil survey data
- Previously completed historic property reports Previously completed archaeology reports
- Bridge Inspection Information SHAARD SHAARD GIS Streetview Imagery

Other (please specify): Indiana Historic Building, Bridges, and Cemeteries Map (IHBBCM); County GIS data (accessed via <https://harrisonin.elevatemaps.io/>); Bridge Inspection Application System (BIAS); 2010 INDOT-sponsored *Historic Bridge Inventory* (HBI); project information provided by HNTB Corporation, dated 2/19/2021 on file at INDOT-CRO.

Harth, Aaron

2020 A Phase Ia Archaeological Reconnaissance for a Proposed Bridge Replacement on State Road 64 Approximately 0.11 mile East of State Road 337 in Harrison County, Indiana (INDOT Des. No.: 1900066) (CRA Contract Publication Series 20-520). Cultural Resource Analysts, Inc. Submitted to HNTB Corporation. Report on file at IDNR, DHPA.

Lawhorn, Ashley, and Lisa Kelley

2024 An Addendum to a Phase Ia Archaeological Reconnaissance for a Proposed Bridge Replacement on State Road 64 Approximately 0.11 mile East of State Road 337 in Harrison County, Indiana (INDOT Des. No. 1900066). Report on file, Indiana Department of Transportation, Cultural Resources Office,

Last revised 9-23-08

Page 1 of 4

Indianapolis, IN.

Please specify all applicable categories and condition(s) (**applicable conditions are highlighted**):

A-9. Installation, repair, or replacement of erosion control measures along roadways, waterways and bridge piers within previously disturbed soils.

B-12. Replacement, widening, or raising the elevation of the superstructure on existing bridges, and bridge replacement projects (when both the superstructure and substructure are removed), under the following conditions [**BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied**]:

Condition A (Archaeological Resources)

One of the two conditions listed below must be met (*EITHER Condition i or Condition ii must be satisfied*):

- i. Work occurs in previously disturbed soils; *OR*
- ii. Work occurs in undisturbed soils and an archaeological investigation conducted by the applicant and reviewed by INDOT Cultural Resources Office determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area. If the archaeological investigation locates National Register-listed or potentially National Register-eligible archaeological resources, then full Section 106 review will be required. Copies of any archaeological reports prepared for the project will be provided to the DHPA and any archaeological site form information will be entered directly into the SHAARD by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Condition B (Above-Ground Resources)

The conditions listed below must be met (*BOTH Condition i and Condition ii must be satisfied*)

- i. Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; *AND*
- ii. With regard to the subject bridge, at least one of the conditions listed below is satisfied (*AT LEAST one of the conditions a, b or c, must be fulfilled*):
 - a. The latest Historic Bridge Inventory identified the bridge as non-historic (see <http://www.in.gov/indot/2531.htm>);
 - b. The bridge was built after 1945, and is a common type as defined in Section V. of the Program Comment Issued for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges issued by the Advisory Council on Historic Preservation on November 2, 2012 for so long as that Program Comment remains in effect AND the considerations listed in Section IV of the Program Comment do not apply;
 - c. The bridge is part of the Interstate system and was determined not eligible for the National Register under the Section 106 Exemption Regarding Effects to the Interstate Highway System adopted by the Advisory Council on Historic Preservation on March 10, 2005, for so long as that Exemption remains in effect.

Are there any commitments associated with this project? If yes, please explain and include in the Additional Comments Section below. yes no

Does the project result in a de minimis impact to a Section 4(f) protected historic resource? If yes, please explain in the Additional Comments Section below. yes no

Additional comments:

Above-ground Resources

An INDOT-Cultural Resources Office (CRO) historian who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 first performed a desktop review, checking the

Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) lists for Harrison County. No listed resources are present within 0.25 mile of the project area, a distance that would serve as an adequate area of potential effects (APE) given the scope of the project and the surrounding terrain.

The *Harrison County Interim Report* (1987; Blue River Township) of the Indiana Historic Sites and Structures Inventory (IHSSI) was also consulted. The National Register & IHSSI information is available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). The SHAARD information was checked against the interim report hard-copy maps. No IHSSI sites are recorded within 0.25 mile of the project.

Land surrounding the project area, which is on the northern edge of a small town, is agricultural with scattered residential, farming and commercial areas. A review of available streetview imagery and county GIS/property records shows that two (2) above-ground resources that are or will be 50 years of age by the proposed 2023 project letting have a view of the project area: **1)** 4955 SR 64 (c.-1951 massed ranch with c.-1990 attached garage); **2)** 4870 SR 64; c/-1960 ranch house. The c.-1951 massed ranch house appears to retain material integrity with few alterations aside from the c.-1990 garage, but it is not an excellent example of the ranch style. The c.-1960 ranch house has undergone multiple physical alterations over time that have served to negate its material significance. No other above-ground resources were recorded near the project location that are or will be 50 years of age by the proposed 2023 letting.

The subject structure (#064-31-06286/NBI #023130) is a concrete culvert constructed c.-1950. The INDOT *Historic Bridge Inventory* determined that this bridge is not eligible for listing in the National Register (Volume 2, Section 2, page 538).

Based on the available information, as summarized above, no above-ground concerns exist as long as the project scope does not change.

2023 Revised submission information: No above-ground changes

Archaeological Resources

An INDOT CRO archaeologist who met the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 reviewed and concurred with the archaeological report submitted by CRA, Inc (Harth 2020). The records check found the project area had not been subjected to an archaeological reconnaissance and that no archaeological sites were recorded within or adjacent to the undertaking.

The archaeological reconnaissance consisted of a visual inspection of the project area and a shovel test probes (STP) to examine all undisturbed areas. The 28 STP were all negative. The soil series data and observations on the eroded nature of the soils indicated that the project area has very low potential for buried archaeological sites and so no additional archaeological investigation was recommended.

2023 Revised submission information: Due to project scope changes, an additional 0.76 acres consisting of a pasture, residential lawn, and road ROW were investigated via visual inspection and shovel test probing (n=7). All shovel probes were negative for any archaeological materials. The soils in the survey area are consistent with the soils of the initial investigation (Lawhorn and Kelley 2024). Thus, there are no archaeological concerns as long as the project scope and footprint do not change.

Accidental Discovery: If any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, construction in the immediate area of the find will be stopped and the INDOT Cultural Resources Office and the Division of Historic Preservation and Archaeology will be notified immediately.

INDOT Cultural Resources staff reviewer(s): Susan Branigin, Matt Coon, and KayLee Blum

****Be sure to attach this form to the National Environmental Policy Act documentation for this project. Also, the NEPA documentation shall reference and include the description of the specific stipulation in the PA that qualifies the project as exempt from further Section 106 review.*



INDIANA ARCHAEOLOGICAL SHORT REPORT

State Form 54566 (R2 / 11-20)

INDIANA DEPARTMENT OF NATURAL RESOURCES DIVISION OF HISTORIC PRESERVATION AND ARCHAEOLOGY

402 West Washington Street, Room W274

Indianapolis, Indiana 46204-2739

Telephone Number: (317) 232-1646

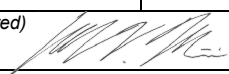
Fax Number: (317) 232-0693

E-mail: dhpa@dnr.IN.gov

Where applicable, the use of this form is recommended but not required by the Division of Historic Preservation and Archaeology (DHPA).

Name(s) of author(s) Aaron L. Harth		Date (month, day, year) 12/4/2020	
Title of project A Phase Ia Archaeological Reconnaissance for a Proposed Bridge Replacement on State Road 64 Approximately 0.11 mile East of State Road 337 in Harrison County, Indiana (INDOT Des. No.: 1900066) (CRA Contract Publication Series 20-520).			
This document is being used to report on the results of: <input type="checkbox"/> Records check only <input checked="" type="checkbox"/> Records check and Phase Ia archaeological reconnaissance <input type="checkbox"/> An addendum to a previous archaeological report. <i>For an addendum, provide the following information.</i>			
Name(s) of author(s) of previous report N/A			
Title of previous report N/A			
Date of previous report (month, day, year) N/A		DHPA number N/A	

PROJECT OVERVIEW

Description of project The project will involve the replacement of the single span concrete slab bridge that carries State Road (SR) 64 over an unnamed intermittent tributary of the Blue River (Figures 1 and 2). The proposed surface disturbances will occur along both sides of SR 64 beginning approximately 80 m (263 ft) east of SR 337 in Harrison County. The archaeological survey area encompasses approximately 0.82 ha (2.03 acres) of pasture, residential lawns, and wooded riparian corridor (Figure 3).			
INDOT designation number(s) 1900066	Project number CRA No. I200024	DHPA number N/A	DHPA plan number N/A
Prepared for: (Company / Institution / Agency) HNTB Corporation			
Name of contact Kia Gillette			
Address (number and street, city, state, and ZIP code) 111 Monument Circle, Suite 1200 Indianapolis, IN 46204			
Telephone number (317)917-5333	E-mail address Kgillette@hntb.com		
Name of principal investigator Andrew V. Martin, RPA 61710			
Name of company / institution Cultural Resource Analysts, Inc. (CRA)			
Address (number and street, city, state, and ZIP code) 201 Northwest Fourth Street, Suite 204 Evansville, IN 47708			
Telephone number (812)253-3009	E-mail address amartin@crai-ky.com		
Signature of principal investigator (Required) 		Date (month, day, year) 12/4/20	

PROJECT LOCATION

County Harrison	USGS 7.5' series topographic quadrangle Depauw			Civil township Blue River		
Legal Location						
Grid alignment SW						
1/4	1/4	1/4	1/4	Section	Township	Range
	SW	SW	SW	17	2S	3E
	SE	SW	SW	17	2S	3E

Number of shovel probes excavated 26	Number of cores / auger probes 0
<p><i>Describe disturbances. Attach photographs documenting disturbances.</i></p> <p>The primary cause of disturbances in the survey area has been the construction/maintenance of SR 64 and the extant culvert (Figure 4). For example, SR 64 rests on a raised earthen road bed that is wider than the edges of the pavement across the survey area. The roadway also has graded drainage ditches along either side, and a buried water line is present along the northern side of the road (Figure 5). In addition, the construction of a concrete driveway and the recent addition of overhead utility line poles have disturbed the mowed lawn in the southwestern portion of the survey area (Figure 6).</p>	
Actual area surveyed (hectares) 0.82	Actual area surveyed (acres) 2.03
<p><i>Explain results of fieldwork.</i></p> <p>The majority of the survey area is located on uplands that are mapped as Alfisols. The shovel tests showed that the soils on the uplands conformed to the general range of characteristics attributed to the mapped soil series in terms of color and texture. However, the B horizon sediments were generally encountered at much more shallow depths (5–10 cm [2–4 in] bgs) than are normal for the mapped soils, and the reddish clay Bt3 horizon sediments which are generally present between 30 and 40 cm (12 and 16 in) below the ground surface (bgs) were often identified just below the Ap horizon. This does suggest that the landforms in the survey area have significantly eroded. In addition, unnatural inclusions of limestone gravels were observed in shovel tests excavated near the driveway in the southwestern extent of the survey area and in the pasture north of the roadway. A typical soil profile observed on the uplands consisted of a brown (10YR 4/3) silt loam Ap horizon that extended from the ground surface to approximately 12 cm (5 in) bgs. The Ap horizon was generally underlain by brown (7.5YR 4/4) clay loam Bt horizon sediments with common distinct reddish brown (5YR 4/4) mottles.</p> <p>No artifacts, buried cultural horizons, or midden were observed during the excavation of shovel tests in the small area mapped with well-drained Haymond soils. The soils in this area are further from the existing road and are less disturbed than the soils on the uplands. The soil profiles observed in this area had a brown (10YR 5/3) silt loam Ap horizon from the ground surface to approximately 25 cm (10 in) bgs. The Ap horizon was underlain by dark yellowish brown (10YR 4/6) silt loam B horizon sediments with few distinct pale brown (10YR 6/3) mottles which were excavated to 50 cm (20 in) bgs.</p>	

RECOMMENDATIONS
<p>Records check (<i>Check all that apply.</i>)</p> <p><input type="checkbox"/> No archaeological investigation is recommended before the project is allowed to proceed because the records check has determined that the project area does not have the potential to contain archaeological resources.</p> <p><input type="checkbox"/> A Phase Ia archaeological reconnaissance is recommended.</p> <p><input type="checkbox"/> A cemetery development plan may be required under Indiana Code 14-21-1-26.5 because project ground disturbance will be within 100 feet of a cemetery.</p>
<p>Phase Ia archaeological reconnaissance (<i>Check all that apply.</i>)</p> <p><input checked="" type="checkbox"/> It is recommended that the project be allowed to proceed as planned because the Phase Ia archaeological reconnaissance has located no archaeological sites within the project area and/or previously recorded sites that were investigated warrant no additional investigation.</p> <p><input type="checkbox"/> It is recommended that Phase Ic archaeological subsurface reconnaissance be conducted before the project is allowed to proceed. The Phase Ia archaeological reconnaissance has determined that the project area includes landforms which have the potential to contain buried archaeological deposits.</p>
<p>Other recommendations / commitments</p> <p>The soil data and the results of the subsurface reconnaissance show that there is no evidence of cultural deposits within the limited survey area. Considering the small area of potentially undisturbed Holocene-age soils on the floodplain within the survey area (less than 0.04 ha [0.10 acre]), the small size of the intermittent drainage, and the lack of archaeological deposits, there is a low likelihood for deeply buried archaeological deposits. Therefore, no additional deep testing is recommended for the proposed bridge replacement project.</p>

Pursuant to IC-14-21-1, if any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646.

REQUIRED ATTACHMENTS
<p><input checked="" type="checkbox"/> Figure showing project location within Indiana</p> <p><input checked="" type="checkbox"/> USGS topographic map showing the project area (1:24,000 scale)</p> <p><input checked="" type="checkbox"/> Aerial photograph showing the project area, land use and survey methods</p> <p><input checked="" type="checkbox"/> Photographs of the project area, including, if applicable, photographs documenting disturbances</p> <p><input type="checkbox"/> Project plans (<i>if available</i>)</p>
<p>Other attachments</p> <p>References cited</p>



INDIANA ARCHAEOLOGICAL SHORT REPORT

State Form 54566 (R3 / 3-22)

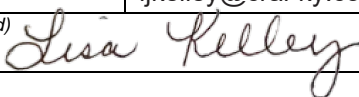
INDIANA DEPARTMENT OF NATURAL RESOURCES DIVISION OF HISTORIC PRESERVATION AND ARCHAEOLOGY

402 West Washington Street, Room W274
Indianapolis, Indiana 46204-2739
Telephone Number: (317) 232-1646
Fax Number: (317) 232-0693
E-mail: dhpa@dnr.IN.gov

Where applicable, the use of this form is recommended but not required by the Division of Historic Preservation and Archaeology (DHPA).

Name(s) of author(s) Ashley Lawhorn, MA, and Lisa Kelley, RPA		Date (month, day, year) April 2, 2024
Title of project An Addendum to a Phase Ia Archaeological Reconnaissance for a Proposed Bridge Replacement on State Road 64 Approximately 0.11 mile East of State Road 337 in Harrison County, Indiana (INDOT Des. No. 1900066)		
This document is being used to report on the results of: <input type="checkbox"/> Records check only <input checked="" type="checkbox"/> Records check and Phase 1a archaeological reconnaissance <input checked="" type="checkbox"/> An addendum to a previous archaeological report. <i>For an addendum, provide the following information.</i>		
Name(s) of author(s) of previous report Aaron L. Harth		
Title of previous report A Phase Ia Archaeological Reconnaissance for a Proposed Bridge Replacement on State Road 64 Approximately 0.11 mile East of State Road 337 in Harrison County, Indiana (INDOT Des. No.: 1900066) (CRA Contract Publication Series 20-520).		
Date of previous report (month, day, year) December 4, 2020	DHPA number N/A	

PROJECT OVERVIEW

Description of project The project located on SR 64 in Harrison County will involve the replacement of the existing structure with a cast-in-place, three-sided, flat-top concrete structure with a clear roadway width of 10 m and a single span of 8 m (Figures 1 and 2). The new bridge number will be 064-31-10475. Guardrail will be installed along the bridge. A portion of an Unnamed Tributary (UNT) of the Blue River drainage feature south of SR 64 will be relocated outside of the proposed road slope. This relocated drainage swale may be planted with native vegetation to filter roadside drainage. Class I riprap on geotextiles will be installed at the base of the bridge. Best management practices (BMPs) will be followed to avoid and minimize impacts to surrounding resources. Approximately 0.50 ha (1.23 acres) of permanent right-of-way (ROW) and approximately 0.01 ha (0.02 acres) of temporary ROW will be acquired for this project. Additionally, the project will require the closure of SR 64 with an official state detour route. The entire area surveyed for the project is larger than the necessary ROW and encompasses 1.13 ha (2.79 acres) (Figure 3).			
INDOT designation number(s) 1900066	Project number CRA Project No.: I230398 Contract Publication Series: 23-416	DHPA number N/A	DHPA plan number N/A
Prepared for: (Company / Institution / Agency) HNTB Corporation			
Name of contact Kia Gillette			
Address (number and street, city, state, and ZIP code) 111 Monument Circle, Suite 1200 Indianapolis, Indiana 46204			
Telephone number (317) 917-5333	E-mail address kgillette@hntb.com		
Name of principal investigator Lisa Kelley, RPA			
Name of company / institution Cultural Resources Analysts, Inc.			
Address (number and street, city, state, and ZIP code) 201 NW Fourth Street, Suite 204, Evansville, Indiana 47708			
Telephone number (812) 253-3009	E-mail address ljkelly@crai-ky.com		
Signature of principal investigator (Required) 			Date (month, day, year) April 2, 2024

PROJECT LOCATION

County Harrison	USGS 7.5' series topographic quadrangle Depauw	Civil township Blue River
Legal Location		
Grid alignment SW		

Explain results of fieldwork.

Approximately 0.82 ha (2.03 acres) of the project area were previously surveyed (Harth 2020). The current survey area encompasses 0.31 ha (0.76 acres) of pasture land, residential lawn, and road ROW.

Approximately 0.20 ha of the survey area was investigated with systematic shovel testing (see Figure 3). Approximately 0.11 ha of the survey area was determined to be disturbed (see Figure 3).

Shovel tests across the survey area conformed to one general soil profile. Zone I consisted of a pale brown (10YR 6/3) silt loam that extended from the ground surface to 16 cm below ground surface (bgs). Zone II was a strong brown (7.5YR 5/6) silty clay loam that contained dark yellowish-brown (10YR 4/6) and very pale brown (10YR 8/4) mottles and extended from 16 to 26 cm bgs. This profile most closely resembles the Knobcreek or Haggatt series.

RECOMMENDATIONS

Records check *(Check all that apply)*

- No archaeological investigation is recommended before the project is allowed to proceed because the records check has determined that the project area does not have the potential to contain archaeological resources.
- A Phase 1a archaeological reconnaissance is recommended.
- Based upon the records check results, a Phase 1a archaeological reconnaissance was recommended and has been conducted.
- A cemetery development plan may be required under Indiana Code 14-21-1-26.5 because project ground disturbance will be within 100 feet of a cemetery.

Phase 1a archaeological reconnaissance *(Check all that apply)*

- It is recommended that the project be allowed to proceed as planned because the Phase 1a archaeological reconnaissance has located no archaeological sites within the project area and/or previously recorded sites that were investigated warrant no additional investigation.
- It is recommended that Phase 1c archaeological subsurface reconnaissance be conducted before the project is allowed to proceed. The Phase 1a archaeological reconnaissance has determined that the project area includes landforms which have the potential to contain buried archaeological deposits.

Other recommendations / commitments

There is no further archaeological work recommended for the project.

Pursuant to IC-14-21-1, if any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646.

REQUIRED ATTACHMENTS

- Figure showing project location within Indiana
- USGS topographic map showing the project area *(1:24,000 scale)*
- Aerial photograph showing the project area, land use and survey methods
- Photographs of the project area, including, if applicable, photographs documenting disturbances
- Project plans *(if available)*

Other attachments

References Cited; Figures 1–6.

References cited *(See short report instructions for required references to be consulted)*

See attached.

Comments

No additional comments.

CURATION

Location of project documentation

Project notes and photographs will be maintained at the Cultural Resource Analysts, Inc., office in Evansville, Indiana.

APPENDIX E: RED FLAG AND HAZARDOUS MATERIALS



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758-ES
Indianapolis, Indiana 46204

PHONE: (317) 463-6848
(317) INDOT4U

Eric Holcomb, Governor
Joe McGuinness, Commissioner

Date: August 26, 2021

To: Site Assessment & Management (SAM)
Environmental Policy Office - Environmental Services Division (ESD)
Indiana Department of Transportation
100 N Senate Avenue, Room N758-ES
Indianapolis, IN 46204

From: Kia Gillette
HNTB Corporation
111 Monument Circle, Suite 1200
Indianapolis, IN 46204
kgillette@hntb.com

Re: RED FLAG INVESTIGATION
DES #1900066, State Project
Bridge Replacement
SR 64 over Branch Blue River, 0.11 Mile East of SR 337
Harrison County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: The proposed project will replace the SR 64 bridge over Branch Blue River, 0.11 mile east of SR 337. The existing bridge is a precast three-sided concrete structure with 24-foot single span and 28-foot clear roadway width. The existing structure will be replaced with a precast three-sided reinforced concrete box structure with headwalls. The proposed structure will have a single 26-foot span and 34-foot clear roadway width. Guardrail will be installed on the bridge. A portion of the Branch Blue River drainage feature south of SR 64 will be relocated outside of the proposed road slope. Riprap will be installed at the base of the bridge and along the SR 64 road slope adjacent to the bridge.

Bridge and/or Culvert Project: Yes No Structure # 064-31-06286A

If this is a bridge project, is the bridge Historical? Yes No , Select Non-Select

(Note: If the project involves a historical bridge, please include the bridge information in the Recommendations Section of the report).

Proposed right of way: Temporary # Acres 0.1 Permanent # Acres 0.7, Not Applicable

Type and proposed depth of excavation: Approximately 15-20 feet below ground surface (bgs) for new bridge construction; approximately 3 feet bgs for relocation of Branch Blue River drainage feature

Maintenance of traffic: Maintenance of traffic will utilize a road closure with an official state detour.

Work in waterway: Yes No Below ordinary high water mark: Yes No

State Project: LPA:

Any other factors influencing recommendations: N/A

*www.in.gov/dot/
An Equal Opportunity Employer*

INFRASTRUCTURE TABLE AND SUMMARY

Infrastructure			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Religious Facilities	N/A	Recreational Facilities	N/A
Airports ¹	N/A	Pipelines	N/A
Cemeteries	N/A	Railroads	3
Hospitals	N/A	Trails	N/A
Schools	N/A	Managed Lands	N/A

¹In order to complete the required airport review, a review of public-use airports within 3.8 miles (20,000 feet) is required.

Explanation:

Railroads: Three (3) railroad segments are located within the 0.5 mile search radius. The nearest railroad segment, Norfolk Southern Railroad, is 0.04 mile southwest of the project area. No impact is expected.

WATER RESOURCES TABLE AND SUMMARY

Water Resources			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
NWI – Points	N/A	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	5
Canal Structures – Historic	N/A	Lakes	7
NPS NRI Listed	N/A	Floodplain - DFIRM	N/A
NWI-Lines	N/A	Cave Entrance Density	2
IDEM 303d Listed Streams and Lakes (Impaired)	N/A	Sinkhole Areas	1
Rivers and Streams	4	Sinking-Stream Basins	1

Explanation:

Rivers and Streams: Four (4) river and stream segments are located within the 0.5 mile search radius. One (1) river and stream segment, Branch Blue River, is located within the project area. A Waters of the US Report will be prepared and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

NWI-Wetlands: Five (5) NWI-Wetlands are located within the 0.5 mile search radius. The nearest wetland is located 0.14 mile southeast of the project area. No impact is expected.

Lakes: Seven (7) lakes are located within the 0.5 mile search radius. The nearest lake is located 0.10 mile east of the project area. No impact is expected.

Cave Entrance Density: Two (2) cave entrance density polygons are located within the 0.5 mile search radius. The nearest cave entrance density polygon is located 0.25 mile east of the project area. No impact is expected.

*www.in.gov/dot/
An Equal Opportunity Employer*

Sinkhole Area: One (1) sinkhole area is located within the 0.5 mile search radius. The sinkhole area is within the project area. Coordination with INDOT ESD Ecology and Waterway Permitting will occur.

Sinking Stream Basin: One (1) sinking stream basin is located within the 0.5 mile search radius. The nearest sinking stream basin is located 0.12 mile east of the project area. No impact is expected.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

Mining/Mineral Exploration			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Petroleum Wells	N/A	Mineral Resources	N/A
Mines – Surface	N/A	Mines – Underground	N/A

Explanation: No mining and mineral resources were identified within the 0.5 mile search radius.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Superfund	N/A	Manufactured Gas Plant Sites	N/A
RCRA Generator/ TSD	N/A	Open Dump Waste Sites	N/A
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A
State Cleanup Sites	N/A	Waste Transfer Stations	N/A
Septage Waste Sites	N/A	Tire Waste Sites	N/A
Underground Storage Tank (UST) Sites	1	Confined Feeding Operations (CFO)	N/A
Voluntary Remediation Program	N/A	Brownfields	N/A
Construction Demolition Waste	N/A	Institutional Controls	N/A
Solid Waste Landfill	N/A	NPDES Facilities	N/A
Infectious/Medical Waste Sites	N/A	NPDES Pipe Locations	N/A
Leaking Underground Storage (LUST) Sites	1	Notice of Contamination Sites	N/A

Unless otherwise noted, site specific details presented in this section were obtained from documents reviewed on the Indiana Department of Environmental Management (IDEM) Virtual File Cabinet (VFC).

Explanation:

Underground Storage Tank (UST) Sites: One (1) UST Site is located within the 0.5 mile search radius. Highway 64 Fuel Center Food Mart (AID# 51157, 4995 SR 64 Northwest, Depauw, IN 47115) is mapped 0.02 mile southwest of the project area but is located 0.01 mile west of the project area. IDEM conducted an UST Inspection on May 19, 2017 and the facility was found to be out of compliance with equipment, operating, and maintenance requirements set forth in Indiana's UST Rule IAC 9. Documentation reviewed does not indicate that a release occurred. No impact is expected.

Leaking Underground Storage (LUST) Sites: One (1) LUST Site is located within the 0.5 mile search radius. Satterfield Service Station/Satterfield Garage (AID# 50497, 9015 SR 337 Northwest, Depauw, IN 47115) is located 0.09 mile southwest of the project area. According to the Site Closure documentation, abandoned USTs were removed from the property/SR 337 right-of-way in 1991. Fifty (50) to eighty (80) cubic yards of gasoline contaminated soil were removed for disposal in 1991, and a Site Assessment for Closure Log states that Total Petroleum Hydrocarbon results were less than 0.1 parts per million. No impact is expected.

ECOLOGICAL INFORMATION SUMMARY

The Harrison County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is provided at https://www.in.gov/dnr/naturepreserve/files/np_harrison.pdf. A preliminary review of the Indiana Natural Heritage Database by INDOT ESD did indicate the presence of ETR species within the 0.5 mile search radius. Coordination with USFWS and IDNR will occur.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The October 16, 2020, inspection report for Bridge # 064-31-06286A states that no evidence of bats was seen or heard under the bridge. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

RECOMMENDATIONS SECTION

Include recommendations from each section. If there are no recommendations, please indicate N/A:

INFRASTRUCTURE: N/A

WATER RESOURCES:

The presence of the following water resource will require the preparation of a Waters of the US Report and coordination with INDOT ESD Ecology and Waterway Permitting:

- Branch Blue River flows through the project area.

Sinkhole Area: One (1) sinkhole area is located within the project area. Coordination with INDOT ESD Ecology and Waterway Permitting will occur.

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: N/A

ECOLOGICAL INFORMATION: Coordination with USFWS and IDNR will occur. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent “Using the USFWS’s IPaC System for Listed Bat Consultation INDOT Projects”.

INDOT ESD concurrence: _____
Digitally signed by Marlene Mathas
Date: 2021.09.01 10:36:45 -04'00'
Marlene Mathas (Signature)

Prepared by:
Kia Gillette
Environmental Project Manager
HNTB Corporation

Graphics:

A map for each report section with a 0.5 mile search radius buffer around all project area(s) showing all items identified as possible items of concern is attached. If there is not a section map included, please change the YES to N/A:

SITE LOCATION: YES

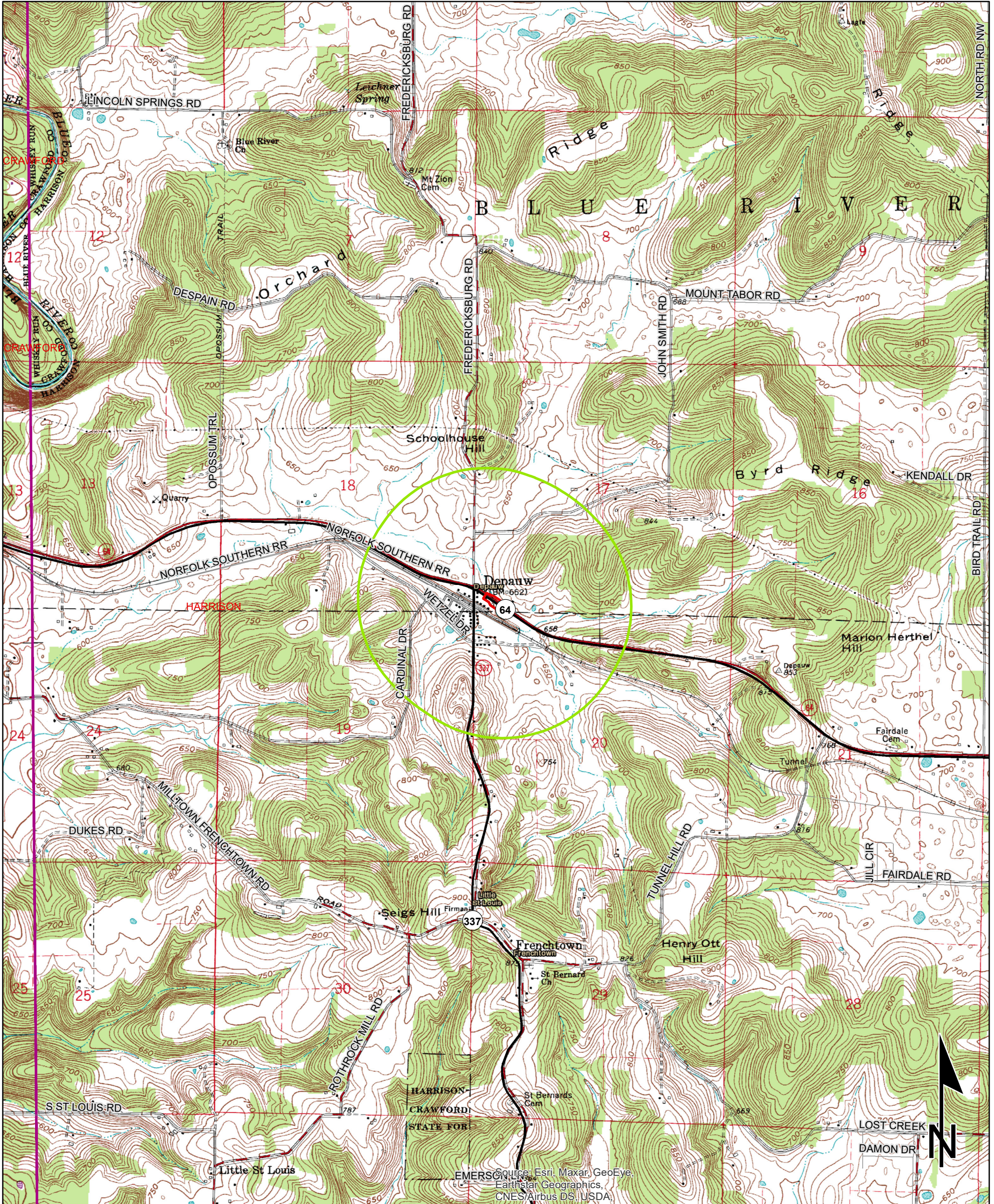
INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: YES

Red Flag Investigation - Site Location
 SR 64 over Branch Blue River, 0.11 Mile East of SR 337
 Des. No. 1900066, Bridge Replacement
 Harrison County, Indiana



Sources: 0.5 0.25 0 0.5 Miles
Non Orthophotography
 Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
 Map Projection: UTM Zone 16 N Map Datum: NAD83
 This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

**DEPAUW
 QUADRANGLE
 INDIANA
 7.5 MINUTE SERIES
 (TOPOGRAPHIC)**

Red Flag Investigation - Infrastructure

SR 64 over Branch Blue River, 0.11 Mile East of SR 337

Des. No. 1900066, Bridge Replacement

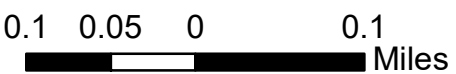
Harrison County, Indiana



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA,

Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.



	Religious Facility		Recreation Facility		Project Area
	Airport		Pipeline		Half Mile Radius
	Cemeteries		Railroad		Toll
	Hospital		Trails		Interstate
	School		Managed Lands		State Route
			County Boundary		US Route
					Local Road

Red Flag Investigation - Water Resources

SR 64 over Branch Blue River, 0.11 Mile East of SR 337

Des. No. 1900066, Bridge Replacement

Harrison County, Indiana



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA,

Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

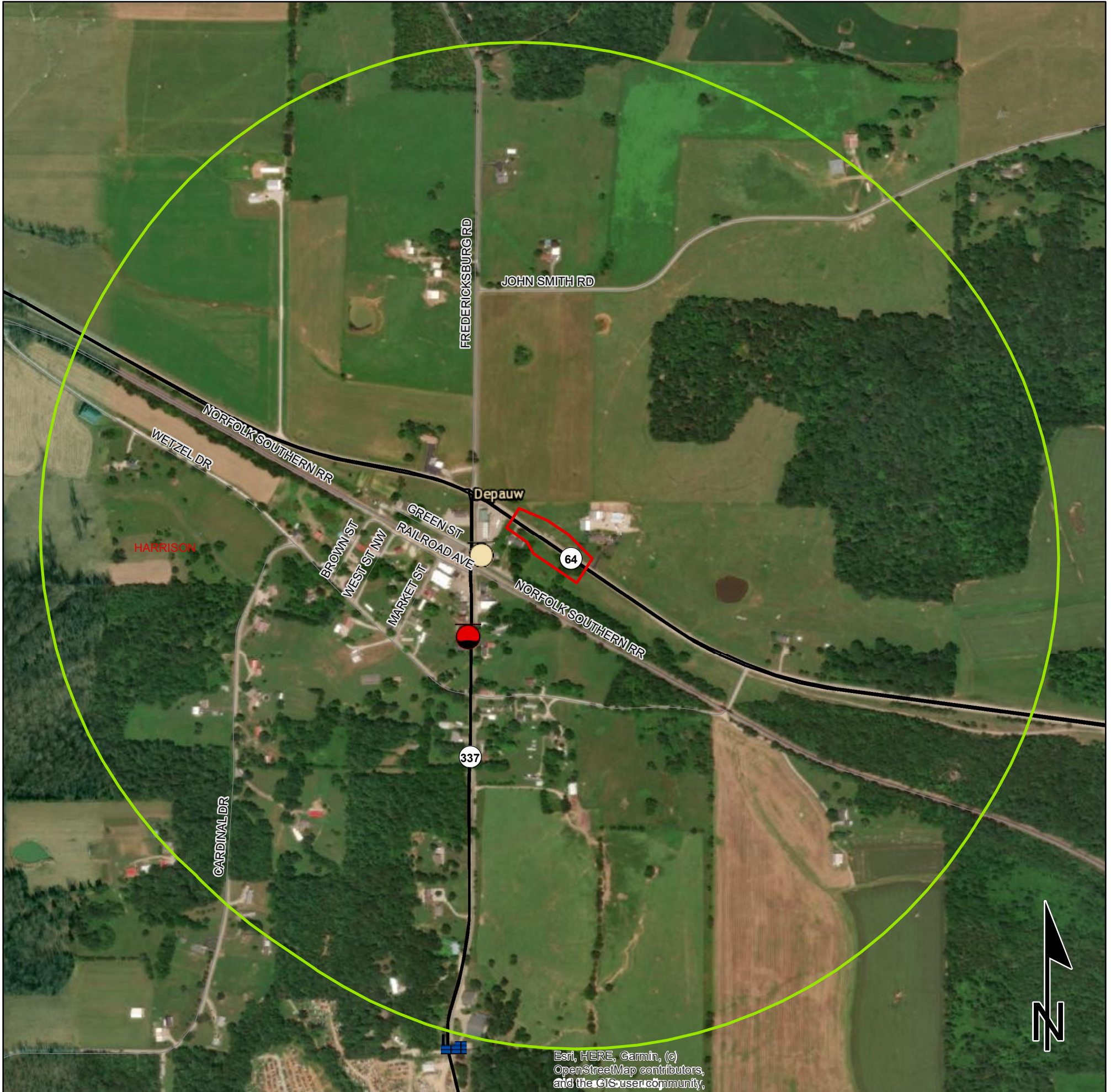
NWI - Point	Wetlands	Project Area
Karst Spring	Lake	Half Mile Radius
NWI - Line	Floodplain - DFIRM	Toll
Impaired_Stream_Lake	Cave Entrance Density	Interstate
NPS NRI listed	Sinkhole Area	State Route
River	Sinking-Stream Basin	US Route
Canal Structure - Historic	County Boundary	Local Road
Canal Route - Historic		

Red Flag Investigation - Hazardous Material Concerns

SR 64 over Branch Blue River, 0.11 Mile East of SR 337

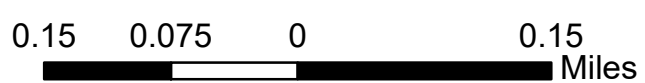
Des. No. 1900066, Bridge Replacement

Harrison County, Indiana



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community.

<ul style="list-style-type: none"> Brownfield RCRA Corrective Action Sites Confined Feeding Operation Notice Of Contamination Construction/Demolition Site Infectious/Medical Waste Site Leaking Underground Storage Tank Manufactured Gas Plant NPDES Facilities NPDES Pipe Locations Open Dump Waste Site 	<ul style="list-style-type: none"> RCRA Generator/TSD Restricted Waste Site Septage Waste Site Solid Waste Landfill State Cleanup Site Superfund Tire Waste Site Underground Storage Tank Voluntary Remediation Program Waste Transfer Station 	<ul style="list-style-type: none"> Institutional Controls County Boundary Project Area Half Mile Radius Toll Interstate State Route US Route Local Road
---	--	---



This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

From: INDOT.esd.sam
To: [Kia Gillette](#)
Cc: [Dye, David](#); [Prince, Greg](#); [Caroline Tegeler](#)
Subject: RE: Des. No. 1900066 - SR 64 Bridge Replacement, Harrison County - RFI Addendum
Date: Monday, November 21, 2022 8:01:47 AM
Attachments: [image011.png](#)
[image012.png](#)
[image014.png](#)
[image015.png](#)
[image016.png](#)
[image017.png](#)

Hi Kia –

Since there are compliance issues associated with testing and fluid within the spill buckets, SAM would recommend including the below recommendation for the site.

If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary. Refer to Appendix G of the SAM Manual for the recommended procedure to manage and report contamination.

Please update the environmental document with the updated information.

Thank you!

Nicole

Nicole Fohey-Breting

Site Assessment & Management (SAM) Team Lead

100 North Senate Avenue [N758-ES](#)

Indianapolis, Indiana 46204

Office: (317) 416-7084

Email: NFoheyBreting@indot.in.gov

Office Hours: 8 to 4 PM



From: Kia Gillette <kgillette@HNTB.com>
Sent: Monday, November 7, 2022 12:32 PM
To: INDOT.esd.sam <esd.sam@indot.IN.gov>
Cc: Dye, David <DDYE@indot.IN.gov>; Prince, Greg <gprince@indot.IN.gov>; Caroline Tegeler <ctegeler@HNTB.com>
Subject: Des. No. 1900066 - SR 64 Bridge Replacement, Harrison County - RFI Addendum

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or

click links from unknown senders or unexpected email. ****

Dear INDOT SAM,

We've had some updates to the project area for utility relocations for Des. No. 1900066 - SR 64 Bridge Replacement in Harrison County.

The RFI with the original project area was approved on 9/1/2021.

The project area changes are shown below, orange is the original and red is the expanded area. A quick review of the RFI data did not show any new features mapped within the new areas; however, the Fuel Center Food Mart (a UST) is now located adjacent to the project area to the south. The original RFI mentioned IDEM conducted an UST inspection on May 19, 2017 and the facility was found to be out of compliance with equipment, operating, and maintenance requirements set forth in Indiana's UST Rule IAC 9. The documentation did not indicate that a release had occurred. A quick check of the VFC showed an inspection was completed by IDEM on October 26, 2022. No indication of a release, but it appears to be out of compliance with some requirements (see attached).

Do you think an Addendum RFI is needed for the project?

Please let me know if you have questions.

Thanks,
Kia

Kia Gillette

Environmental Project Manager

Tel (317) 917-5240 Cell (317) 695-0825 Email kgillette@hntb.com

HNTB CORPORATION

111 Monument Circle, Suite 1200 | Indianapolis, IN 46204 | www.hntb.com

 **100+ YEARS OF INFRASTRUCTURE SOLUTIONS**



This e-mail and any files transmitted with it are confidential and are intended solely for the use of the individual or entity to whom they are addressed. If you are NOT the intended recipient and receive this communication, please delete this message and any attachments. Thank you.

APPENDIX F: WATER RESOURCES

Jacob Burskey
Approved 1/13/2023

Waters of the U.S. Report

SR 64 BRIDGE REPLACEMENT PROJECT



HARRISON
COUNTY

DES. NO.
1900066

Prepared by:

HNTB

111 Monument Circle, Suite 1200
Indianapolis, IN, 46204
317.636.4682

January 9, 2023

Revised

1. PROJECT INFORMATION

Dates of Field Reconnaissance: July 23, 2020, October 26, 2020, and October 4, 2022

1.1 LOCATION

This project is located on State Road (SR) 64 Harrison County, Indiana.

- Sections 17 and 20, Township 2 South, Range 3 East
- Depauw Quadrangle, Indiana 7.5 Minute Series
- 38.335513, -86.215977 NAD 83 InGCS Harrison-Washington

1.2 PROJECT DESCRIPTION

The proposed project will replace the SR 64 bridge over Branch Blue River (064-31-10475-A), 0.11 mile east of SR 337. The existing bridge is a precast three-sided concrete structure with 24-foot single span and 28-foot clear roadway width. The existing structure will be replaced with a precast three-sided reinforced concrete box structure with headwalls. The proposed structure will have a single 26-foot span and 34-foot clear roadway width. Guardrail will be installed on the bridge. A portion of the Branch Blue River drainage feature south of SR 64 will be relocated outside of the proposed road slope. Riprap will be installed at the base of the bridge and along the SR 64 road slope adjacent to the bridge. The project area was made larger in the summer 2022 to accommodate utility relocation needs.

2. DESKTOP RECONNAISSANCE

2.1 SOIL ASSOCIATIONS AND SERIES TYPES

According to the Soil Survey Geographic (SSURGO) Database for Harrison County, Indiana, the following mapped soils series are within the investigated area (Attachment pages 7-11).

- **Crider silt loam (CtaB):** the Crider series consists of deep to very deep, well drained loess, loamy materials, and clayey residuum over the underlying Mississippian limestone bedrock. These soils are found on the side slopes of hills and sinkholes. Slopes are 2-8%. Crider silt loam is not considered a hydric soil. This soil type has a hydric rating of 0%.
- **Haymond silt loam (HcpAP):** the Haymond series consists of very deep, well drained, soils that formed in silty alluvium. These soils are on flood plains and flood-plain steps. Slopes are 0-2%. Haymond silt loam is not considered a hydric soil. This soil type has a hydric rating of 0%.
- **Knobcreek-Haggatt-Caneyville silt loams (KxtC2):** the Knobcreek series consists of very deep, well drained soils that formed in thin loess and the underlying clayey residuum, and are on hills and sinkholes underlain with limestone. Slopes range from 6 to 25%. The Haggatt series consists of deep to very deep, well drained loess, loamy materials, and clayey residuum over the underlying Mississippian limestone bedrock. Slopes are 2-25%. The Caneyville series consists of moderately deep, well drained thin loess and the underlying clayey residuum over

Mississippian limestone bedrock. These soils are found on ridges and hillsides. Knobcreek-Haggatt-Caneyville silt loam soil is eroded. Slopes are 2-120%. Knobcreek-Haggatt-Caneyville silt loam is not considered a hydric soil. This soil type has a hydric rating of 0%.

- **Knobcreek-Haggatt-Caneyville complex (KxtC3):** the Knobcreek series consists of very deep, well drained soils that formed in thin loess and the underlying clayey residuum, and are on hills and sinkholes underlain with limestone. Slopes range from 6 to 25%. The Haggatt series consists of deep to very deep, well drained loess, loamy materials, and clayey residuum over the underlying Mississippian limestone bedrock. Slopes are 2-25%. The Caneyville series consists of moderately deep, well drained thin loess and the underlying clayey residuum over Mississippian limestone bedrock. These soils are found on ridges and hillsides. Knobcreek-Haggatt-Caneyville complex soil is severely eroded. Slopes are 2-120%. Knobcreek-Haggatt-Caneyville complex is not considered a hydric soil. This soil type has a hydric rating of 0%.

2.2 NATIONAL WETLANDS INVENTORY

Based on the U.S. Fish and Wildlife National Wetlands Inventory (NWI) data ([National Wetlands Inventory \(usgs.gov\)](https://www.usgs.gov/national-wetlands-inventory)), there is one wetland polygon mapped within the investigated area. The polygon represents a branch of the Blue River and is mapped as an intermittent, riverine, streambed, seasonally flooded wetland (R4SBC), according to the classifications defined by Corwardin *et al.* (1979) (Attachment page 6).

2.3 HYDROLOGY

The 12-digit Hydrologic Unit Code (HUC) for the investigated area is # 051401040901, which identifies the Slick Run-Blue River Watershed (Attachment page 4). According to the Indiana Floodplain Information Portal, the project is located within the mapped Indiana Department of Natural Resources (IDNR) approximate floodway area (<https://indnr.maps.arcgis.com/apps/webappviewer/index.html?id=05026dabc2e8461983e196d56a213c1e>) (Attachment page 5).

3. FIELD RECONNAISSANCE

HNTB Indiana staff performed a field review of the investigated area on July 23, 2020 and October 26, 2020. An additional field survey was completed on October 4, 2022 to investigate the area northwest of the bridge for possible utility relocation work. The purpose was to determine the presence of waters of the U.S. within the investigated area. HNTB Indiana staff collected data during the field review to appropriately characterize the investigated area and determine the presence or absence of jurisdictional waters. The field investigation encompassed the area required for construction access, utility relocation work, and completion of the bridge replacement work. HNTB staff photographed select features and areas of interest throughout the investigated area. A photo location map and selected photographs are included as Attachment pages 13-30.

The investigated area was analyzed using the methods outlined in the Routine Determination, On-site Inspection Necessary procedure in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual Eastern Piedmont Region* (US Army Corps of Engineers, 2010). Identification indicator status of plant species utilized the 2018 Eastern Piedmont Region National Wetland Plant List. Field GIS data was collected using a Trimble R1 GNSS GPS with sub-meter accuracy.

4. WATERS

The July 2020, October 2020, and October 2022 field reconnaissance for the SR 64 bridge replacement investigated area did not reveal any water resources. There is one U.S. Geological Survey (USGS) blue-line stream mapped within the investigated area, which represents a branch of the Blue River. There was no water flowing in the stream during the field investigation, and no ordinary high water mark (OHWM) characteristics were observed. The area adjacent to the bridge drains to an existing vertical pipe under the bridge that drains to a karst feature. No wetlands or roadside ditches with OHWM characteristics were identified within the investigated area.

The investigated area was characterized by the roadside slope, pasture, wooded land, and residential areas. The surrounding land exhibited a generally rolling topography. A karst investigation was completed by a professional geologist within the investigated area. One swallet was identified below the existing structure carrying SR 64. No water features were noted in this area. One depressional area, also identified as a sinkhole, was identified in the northwest quadrant within a livestock field. The depressional area was sparsely vegetated and disturbed by livestock use. A data point, Data Point (DP) 1, was taken within the depressional area. DP 1 is discussed below.

DP 1

This data point was taken within a depression in a livestock field located north of SR 64. The depression was sparsely vegetated. It was identified as a sinkhole and is used as a resting area by cattle. The area was disturbed by livestock use in its natural state, causing the area to be naturally problematic. Dominant vegetation consisted of tall fescue (*Festuca arundinacea*, FACU) and black cherry (*Prunus serotina*, FACU). The dominant vegetation does not have an indicator status wetter than FAC and therefore does not meet the criteria for hydrophytic vegetation. This data point exhibited one secondary wetland hydrology indicator (sparsely vegetated concave surface (B8)) but did not exhibit any primary wetland hydrology indicators; therefore, wetland hydrology was not observed. Soils within a pit excavated to a depth of 20 inches consisted of 20 inches of 10YR 4/3 of silty clay loam with 30% concentrations of 2.5YR 5/8 within the matrix and along pore linings. This point did not exhibit any hydric soil indicators. This point is not located within a wetland as, as hydrophytic vegetation, wetland hydrology, and hydraulic soils were not observed. The data form for this point is included as Attachments, pages 31-33.

5. WILDLIFE EVIDENCE AND CONCERNS

The following structure within the investigated area was examined on October 4, 2022 for the presence of bats and birds and was found to show no signs of occupation:

- Bridge No. 064-31-10475-A, is a 24-foot single-span precast three-sided concrete structure with a 28-foot clear roadway width

The structure was also examined for the use as a wildlife crossing. No evidence of use of the structure as a wildlife crossing was noted. Riprap is present beneath the structure and at the bridge turnouts on both sides of the roadway.




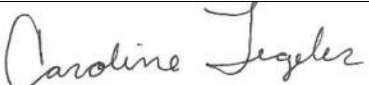
6. CONCLUSION

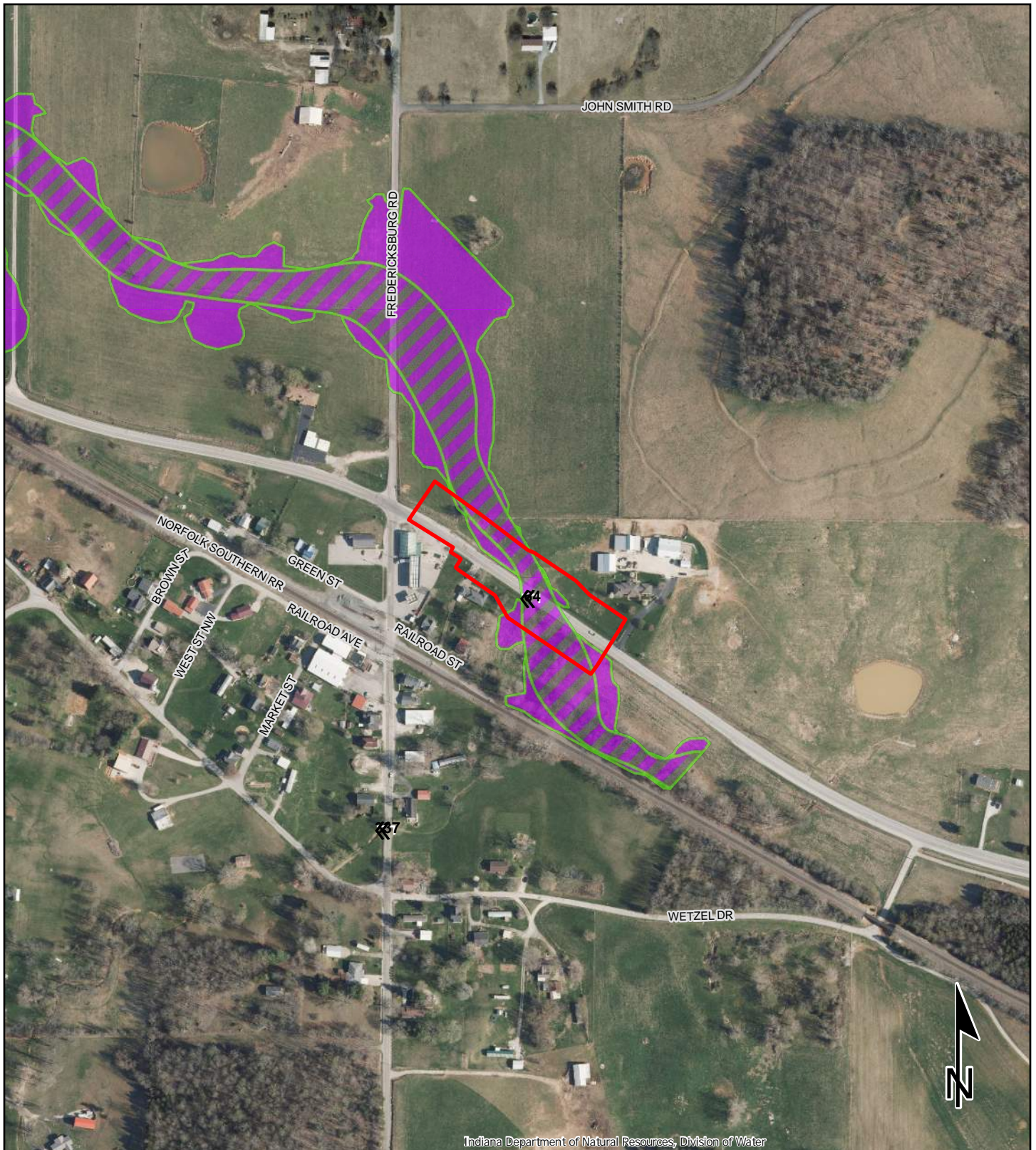
The July 2020, October 2020, and October 2022 field review for the SR 64 bridge replacement did not identify any jurisdictional features within the investigated area. No wetlands, streams, or roadside ditches with OHWM characteristics were identified within the investigated area.

If construction exceeds the limits of the survey review area illustrated in this document, further field investigation will be needed. This report is this office's best judgment of water resources that are likely to be under federal jurisdiction, based on the guidelines set forth by the U.S. Army Corps of Engineers (USACE). The final determination of jurisdictional waters is ultimately the responsibility of the USACE. The INDOT Environmental Services Division should be contacted immediately if impacts occur.

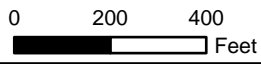
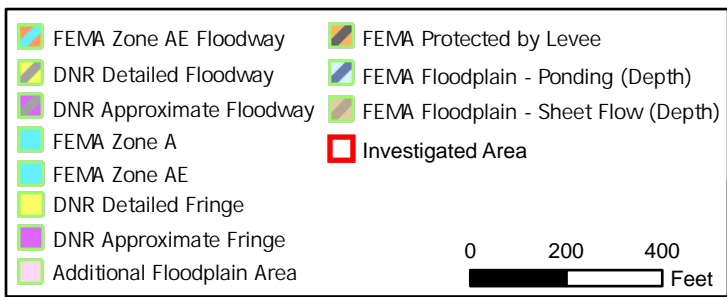
This waters determination has been prepared based on the best available information, interpreted in the light of the investigator's training, experience and professional judgement in conformance with the 1987 *Corps of Engineers Wetlands Delineation Manual*, the appropriate regional supplement, the USACE *Jurisdictional Determination Form Instructional Guidebook*, and other appropriate agency guidelines.

PREPARERS:

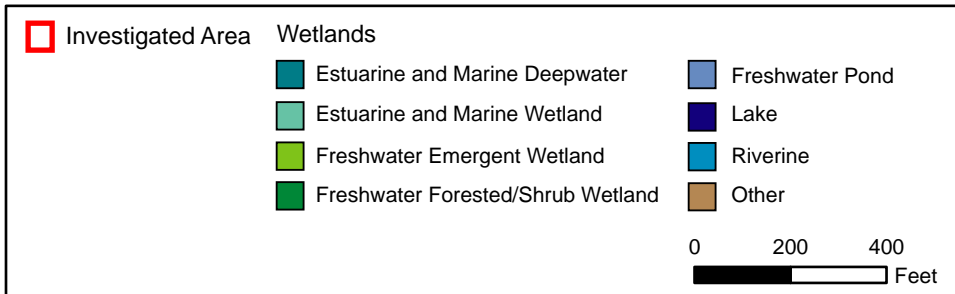
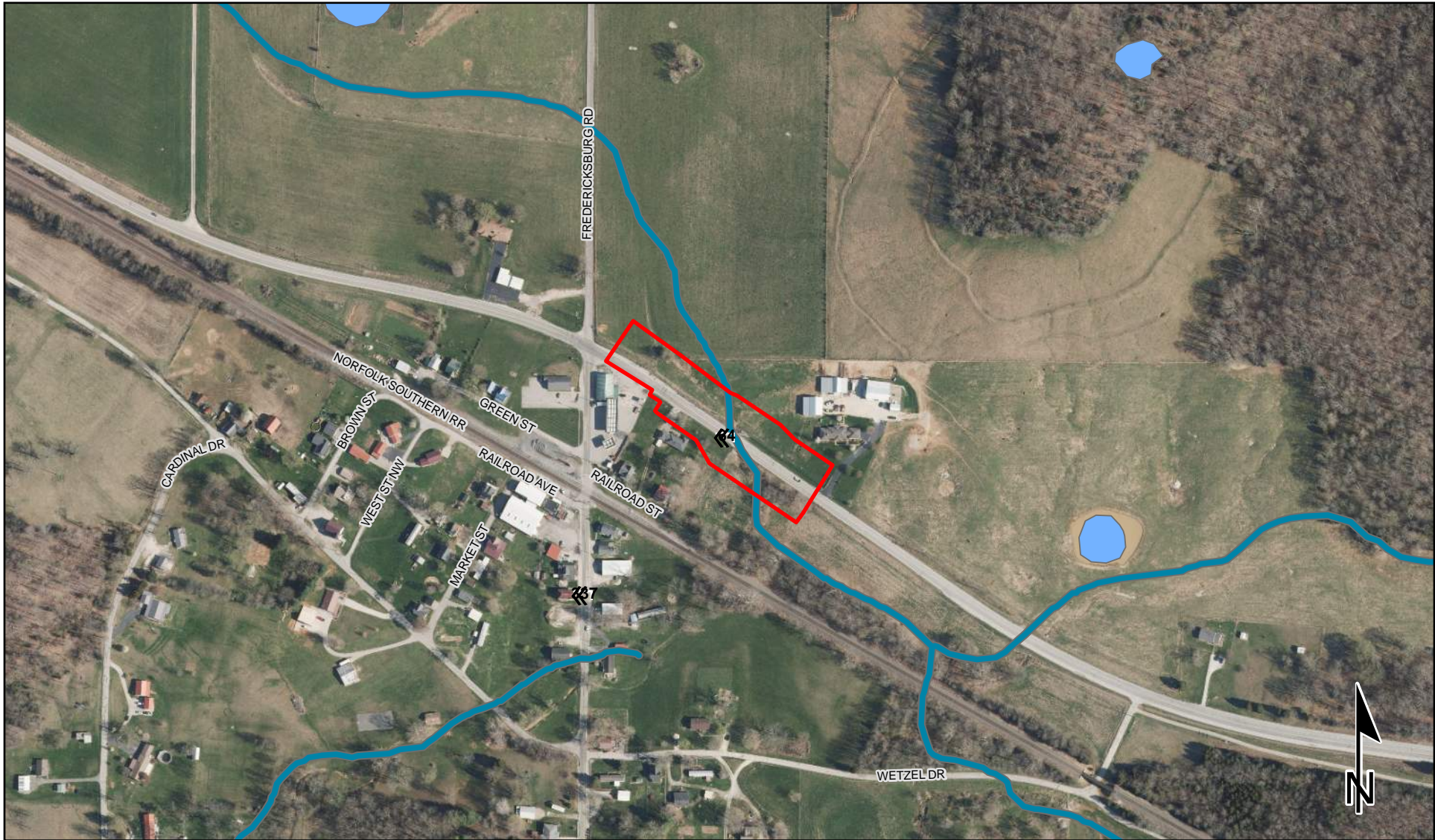
HNTB Inc., Staff	Position	Contributing Effort
 Kia Gillette	Environmental Project Manager	Project Management Field Data Collection
 Kate Williams, PWS	Science Project Manager	Field Data Collection
 Sharon Anton	Environmental Planner II	Report Preparation
 Caroline Tegeler	Environmental Planner II	Report Preparation Field Data Collection



Indiana Department of Natural Resources, Division of Water



<h2>IDNR Floodplain Map</h2> <p>SR 64 Bridge Replacement Project Harrison County, Indiana</p>	
Des. No. Harrison	<p>Graphics created by HNTB Corporation (2022)</p>
1 inch = 400 ft	



National Wetlands Inventory Map
 SR 64 Bridge Replacement Project
 Harrison County, Indiana

Des. No. 1900066
 1 inch = 400 ft

